

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Title V  
AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Toyota Motor Manufacturing, Kentucky, Incorporated  
**Mailing Address:** 1001 Cherry Blossom Way  
Georgetown, KY 40324

**Source Name:** same as above  
**Mailing Address:** same as above

**Source Location:** same as above

**Permit Number:** V-04-027  
**Log Number:** 56340  
**Review Type:** Operating, PSD  
**Source ID #:** 21-209-00030

**Regional Office** Frankfort Regional Office  
643 Teton Trail, STE B  
Frankfort, KY 40601-1758  
(502) 564-3358

**County:** Scott

**Application**  
**Complete Date:** April 16, 2004  
**Issuance Date:** July 30, 2004  
**Expiration Date:** July 30, 2009

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**John Lyons, Director  
Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS**

**ASSEMBLY#1**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**ASSEMBLY #1, 300 BUILDING, Operations** include the following processes:

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
A01	Source Reassigned to Emission Unit A02	July 17, 1986	None	
A02	Miscellaneous Wax Coating Operations, including hinge, engine, and hub wax.	July 17, 1986	None	
A03	Glass Installation, including glass primer, body primer and window sealer.	July 17, 1986	None	
A04	Miscellaneous Adhesive Applications (Insignificant Activities List)	July 17, 1986	None	
A05	Fluid Filling Operations, including windshield cleaner, brake fluid, antifreeze, steering fluid, transmission fluid, refrigerants, and fuel. (Insignificant Activities List)	July 17, 1986	ORVR vapor recovery system for Fuel Fill	
A06	Non-Process Cleaning Activities	July 17, 1986	None	401 KAR 59:185
A07	Process Cleaning Activities, including solvent wiping. (Insignificant Activities List)	July 17, 1986	None	
A08	Process Lubrication, including hose installation. (Insignificant Activities List)	July 17, 1986	None	
A09	Testing Operations, including final line, off-line vehicle inspection, toe tester, test waiter, brake tester, flutter tester, drum roll tester, vibration test and emission test.	July 17, 1986	None	
A10	Paint Hospital, including: (Insignificant Activities List)			
	Sanding and Buffing	July 17, 1986	None	
	Painting Deck	July 17, 1986	None	
A11	Raw Material Supply / Storage (Insignificant Activities List)	July 17, 1986	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
A12	Miscellaneous Assembly Operations, not otherwise listed (e.g., minor repairs, chassis assembly, trim installation, engine installation...). (Insignificant Activities List)	July 17, 1986	None	
A13	General Exhaust	July 17, 1986	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Parts 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks – Compliance Date, April 26, 2007.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

**Specific Operating Limitations for Emission Unit A06:****401 KAR 59:185: § 4, Cold Cleaners (applies to batch degreasers)**

Control Equipment Specifications:

- (a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.
- (b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.
- (c) On all containers, a label must be on or near the cleaner.
- (d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

Operating Requirements:

- (a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.
- (b) The degreaser cover shall be closed when parts are not being handled in the cleaner.
- (c) Cleaned parts shall be drained until dripping stops.

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See Periodic Monitoring Requirements table.

**401 KAR 59:010: §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate in pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**Compliance Demonstration Method:**

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.



## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations(Continued):

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
A02	Miscellaneous Wax Coating	0.28	N/A
A03	Glass Installation	0.11	N/A
A06	Non-Process Cleaning Activities	0.081	N/A
A09	Testing Operations	N/A	0.85
A13	General Exhaust	N/A	1.05

#### **Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) / P$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (number of vehicles produced)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM} (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack "i".

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Assembly #1 Operations of more than 92.4 tons per year of VOC emissions, based on a 12-month rolling average.

#### **Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):**

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Assembly #1 Operations of more than 5.26 tons per year of PM emissions, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

- 1) Calculated from the following equation, except where testing specified (see item 2)

$$\text{PM Value} = \text{SUM} (P \times E_i),$$

P = Average shop production throughput

E<sub>i</sub> = PM Emission Factor (controlled) for "i",

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

- 2) Testing, see periodic monitoring requirements table.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained onsite for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A

**10. Compliance Certification Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****ASSEMBLY #1 - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**ASSEMBLY#2**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**ASSEMBLY #2, 3000 BUILDING,** Operations include the following processes:

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
B01	Source Reassigned to Emission Unit B02	N/A		
B02	Miscellaneous Wax Coating Operations, including hinge, engine and hub wax.	March 22, 1991	None	
B03	Glass Installation, including glass primer, body primer and window sealer.	March 22, 1991	None	
B04	Miscellaneous Adhesive Applications (Insignificant Activities List)	March 22, 1991	None	
B05	Fluid Filling Operations, including windshield cleaner, brake fluid, antifreeze, steering fluid, transmission fluid, refrigerants, and fuel. (Insignificant Activities List)	March 22, 1991	ORVR vapor recovery system for Fuel Fill	
B06	Non-Process Cleaning Activities	March 22, 1991	None	401 KAR 59:185
B07	Process Cleaning Activities, including solvent wiping. (Insignificant Activities List)	March 22, 1991	None	
B08	Process Lubrication, including hose installation. (Insignificant Activities List)	March 22, 1991	None	
B09	Testing Operations, including final line, off-line vehicle inspection, toe tester, test waiter, brake tester, flutter tester, drum roll tester, vibration test and emission test.	March 22, 1991	None	
B10	Paint Hospital, including: (Insignificant Activities List)			
	Sanding and Buffing	March 22, 1991	None	
	Painting Deck	March 22, 1991	None	
B11	Raw Material Supply / Storage (Insignificant Activities List)	March 22, 1991	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
B12	Miscellaneous Assembly Operations, not otherwise listed (e.g., minor repairs, chassis assembly, trim installation, engine installation...). (Insignificant Activities List)	March 22, 1991	None	
B13	General Exhaust	March 22, 1991	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act) ; and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Parts 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks – Compliance Date, April 26, 2007.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

**Specific Operating Limitations for Emission Unit B06:**

**401 KAR 59:185: §4, Cold Cleaners (applies to batch degreasers)**

Control Equipment Specifications:

- (a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.
- (b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.
- (c) On all containers, a label must be on or near the cleaner.
- (d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

Operating Requirements:

- (a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.
- (b) The degreaser cover shall be closed when parts are not being handled in the cleaner.
- (c) Cleaned parts shall be drained until dripping stops.

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See Periodic Monitoring Requirements table.

**401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**Compliance Demonstration Method:**

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations(Continued):

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
B02	Miscellaneous Wax Coating	0.19	N/A
B03	Glass Installation	0.11	N/A
B06	Non-Process Cleaning Activities	0.081	N/A
B09	Testing Operations	N/A	0.79
B13	General Exhaust	N/A	1.08

#### **Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) / P$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (number of vehicles produced)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM} (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack "i".

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Assembly #2 Operations of more than 61.3 tons per year of VOC emissions, based on a 12-month rolling average.

#### **Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):**

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Assembly #2 Operations of more than 8.76 tons per year of PM emissions, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

- 1) Calculated from the following equation, except where testing specified (see item 2)

$$\text{PM Value} = \text{SUM} (P \times E_i) ,$$

P = Average shop production throughput

E<sub>i</sub> = PM Emission Factor (controlled) for “i”,

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

- 2) Testing, see periodic monitoring requirements table.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained onsite for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A

**10. Compliance Certification Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****ASSEMBLY #2 - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**BODY OPERATIONS**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**BODY OPERATIONS, 100/100A BUILDINGS, Operations include the following processes:**

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
C01	Die Construction (Insignificant Activities List)	March 22, 1991	None	
C02	Stamping Press Operations	March 22, 1991	None	
C03	Welding Operations, including Laser (stamping), Arc, and Resistance Welding	March 22, 1991	Primary Arc Weld Robots- Filters WF01 – WF18, or Scrubbers WS01 – WS02 for PM	
C04	Brazing, Grinding and Finishing Operations	March 22, 1991	None	
C05	Asphalt Sheeting Installation / Heatset Ovens	March 22, 1991	Ovens – Filters WF25 – WF27 for PM	
C06	Sealer and Adhesive Application, including Precure Ovens	July 17, 1986	None	
C07	Moonroof Primer Application	March 22, 1991	None	401 KAR 60:005
C08	Small Parts Phosphate System, including De-greasing Tank, Rinse Tanks, and Phosphate Dip Tank (Line 1)	July 17, 1986	None	
C09	Small Parts Electro deposition System, Including Rinse Tanks, Dip Tank, and Oven (Line 1)	July 17, 1986	None	401 KAR 60:005
C10	Fuel Tank Antichip Coating (Line 1 & 2), including Booths & Ovens	March 22, 1991	Booths – Filters WF21, WF24 for PM	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
C11	Process Lubrication (Insignificant Activities List)	March 22, 1991	None	
C12	Non-Process Cleaning Activities	July 17, 1986	None	401 KAR 59:185
C13	Fuel Tank Cleaning (Insignificant Activities List)	July 17, 1986	None	
C14	General Exhaust	March 22, 1991	None	



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act) ; and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 60:005, Standards of performance for automobile and light-duty truck surface coating operations incorporating by reference 40 CFR 60.390 – 60.398 (Subpart MM) applicable to each prime coat operation, guide coat operation, and each topcoat operation that begins construction, modification, or reconstruction after October 5, 1979. (See Section D).

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Parts 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks – Compliance Date, April 26, 2007.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

**Specific Operating Limitations for Emission Unit C12:**

**401 KAR 59:185: § 4, Cold Cleaners** (applies to batch degreasers)

Control Equipment Specifications:

- (a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.
- (b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.
- (c) On all containers, a label must be on or near the cleaner.
- (d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

Operating Requirements:

- (a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.
- (b) The degreaser cover shall be closed when parts are not being handled in the cleaner.
- (c) Cleaned parts shall be drained until dripping stops.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations (Continued):****Specific Operating Limitations for Emission Unit C12 (Continued):**

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See Periodic Monitoring Requirements table.

**401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**Compliance Demonstration Method:**

(1) For affected facilities that use transfer efficiency in the determination of PM/PM<sub>10</sub> emissions the permittee shall:

- (i) Use the transfer efficiency value specified in 40 CFR 60.393 for the application method used; or
- (ii) Use a transfer efficiency value determined through testing approved by the Division.

Previous transfer efficiency tests may be accepted if the following conditions are met:

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****401 KAR 59:010 §3****Compliance Demonstration Method (Continued):**

- (a) The previous test must have been conducted using methods and conditions approved by the Division.
- (b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.
- (c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

(2) Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

For affected facilities with periodic monitoring requirements for particulate emissions the source shall demonstrate continuous compliance by adhering to the periodic monitoring requirements table. The source must maintain a record of deviations from "standard ranges" in the periodic monitoring requirements table and determine the particulate emissions from the deviation. The duration of the deviation shall be the period between when the "out of standard condition" was noted and when it is corrected. If an engineering evaluation utilizing a control efficiency is used to determine particulate emissions for the affected facility, the allowed control efficiency shall be zero during the deviation period unless testing is conducted to prove otherwise. Engineering evaluations for affected facilities with control equipment that utilize a particulate emission rate based on test data must back calculate the control efficiency so that in the event of "out of standard conditions", the permittee can determine "E".

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):**

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
C02	Stamping Operations (All)	0.518	N/A
C03	Welding Activities Line 1 Line 2	N/A N/A	1.38 0.55
C04	Brazing and Grinding Line 1 Line 2	N/A	0.92 1.36
C05	Asphalt Sheeting Line 1 Line 2	N/A	0.40 0.35
C06	Adhesive/Sealer Application Line 1 Line 2	0.120 0.306	N/A
C08	Small Parts Phosphate	N/A	0.39
C09	Small Parts Electro deposition	0.041	0.44
C10	Fuel Tank Antichip Coating Line 1 Line 2	0.209 0.279	1.37 0.20
C12	Non-Process Cleaning Activities	0.270	N/A
C14	General Exhaust	N/A	2.22

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) / P$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (number of vehicles produced)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM} (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack "i".

See Compliance Demonstration method for 401 KAR 59:010, this Section.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Body Operations of more than 182.1 tons per year of VOC emissions from its Line 2 operations and 422.6 tons per year from the entire Body Operations shop, based on a 12-month rolling average.

**Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Body Operations of more than 12.4 tons per year of PM emissions from its Line 2 operations (emission units C03, C04, C05, C06, C08, C10) and 36.1 tons per year from the entire Body Operations shop, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

1) Calculated from the following equation, except where testing specified (see item 2)

PM Value =  $\text{SUM} (P \times E_i)$ ,

$P$  = Average shop production throughput

$E_i$  = PM Emission Factor (controlled) for "i",

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

2) Testing, see Periodic Monitoring Requirements table.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):****40 CFR 60 Subpart MM - 60.392:**

The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

<b>NSPS CATEGORY</b> (Affected Facilities)	<b>EMISSION LIMIT</b> (kg VOC per liter solid applied)	<b>COATINGS INCLUDED IN GROUP</b>
<b>(a) - Primecoat Operations</b>	0.17	C07- Moonroof Primer C09- Electro deposition

**Compliance Demonstration Method:**

See Section D.4 and D.5

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

See Section D.4 and D.5

The permittee shall perform a Method 5 test for the small parts electro deposition oven (emission unit C09). The permittee shall use engineering evaluation or the appropriate test method to determine Volatile Organic Compound (VOC) emissions from the small parts electro deposition oven. The permittee shall submit a compliance schedule for the testing to the Division within 90 days of the issuance of this permit.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

See Section D.4

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained onsite for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.  
See Section D.4

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.  
See Section D.4

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

The permittee shall submit a compliance schedule for all required transfer efficiency, carry over efficiency and capture efficiency tests to the Division 90 days after issuance of the permit. The Compliance schedule shall specify the emission units and machine points that are to be tested and the proposed test date.  
See Section D.5

**10. Compliance Certification Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****BODY OPERATIONS - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
C03	Welding Operations – Arc Welding Robots (Primary)	Exhaust Filters (WF1-WF18)	Filter Condition	Pressure Drop	Gauge	Continuous	Monthly	Annual	0.2 – 7.0 inches of water
C03	Welding Operations – Arc Welding Robots (Primary)	Water Scrubber (WS01-WS03)	Collection Efficiency	Exhaust Air Flow	Visual	Weekly	Weekly	N/A	Fan Running
C03	Welding Operations – Arc Welding Robots (Primary)	Water Scrubber (WS01-WS03)	Collection Efficiency	Level Gauge Operation	Meter	Weekly	Weekly	Annual	Device performing per manufacturer specifications
C03	Welding Operations – Arc Welding Robots (Primary)	Water Scrubber (WS01-WS03)	Removal Efficiency	Pressure Drop	Gauge	Continuous	Weekly	Annual	TBD Need to address
C06	Asphalt Sheeting (Bond Ovens)	Exhaust Filters (WF25-WF27)	Filter Condition	In Place / Build-up	Visual	Weekly	Weekly	N/A	No Visible By-Pass
C12	Fuel Tank Antichip Coating (1 & 2)	Booth Exhaust Filters (WF21,WF24)	Filter Condition	In Place, Build-up	Visual	Weekly	Weekly	N/A	No Visible By-Pass



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**FACILITIES CONTROL**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulation 401 KAR 51:017 shall apply to all affected facilities listed in the following table.

**FACILITIES CONTROL**, Operations include the following processes:

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
D01	Utility Boilers utilizing Natural Gas or # 2 Fuel Oil, including:			
	Boiler 1 (50 MMBtu/hr)	July 17, 1986	Low NOx Burners	401 KAR 59:015
	Boiler 2 (99 MMBtu/hr)	July 17, 1986	Low NOx Burners	401 KAR 59:015
	Boiler 3 (99 MMBtu/hr)	July 17, 1986	Low NOx Burners	401 KAR 59:015
	Boiler 4 (99 MMBtu/hr)	July 17, 1986	Low NOx Burners	401 KAR 59:015
	Boiler 5 (99 MMBtu/hr)	July 17, 1986	Low NOx Burners	401 KAR 59:015
	Boiler 6 (99 MMBtu/hr)	July 17, 1986	Low NOx Burners	401 KAR 59:015
D02	Wastewater Pretreatment Facility (Insignificant Activities List)	March 22, 1991	None	
D03	Indirect Heat Exchangers (Plant 2) > 1 MMBtu/hr & < 10 MMBtu/hr, (Natural Gas Only) (Total Capacity = 690 MMBtu/hr)	1991 – 1999	None	401 KAR 59:015
	Indirect Heat Exchangers (Plant 1) > 1 MMBtu/hr & < 10 MM Btu/hr, (Natural Gas Only) (Total Capacity = 281 MMBtu/hr)	1991 – 1999		
D04	Not Assigned	March 22, 1991	None	
D05	Cooling Tower Facilities, including primary towers and individual building towers (Insignificant Activities List)	March 22, 1991	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
D06	Raw Material Storage / Supply	March 22, 1991	Gasoline and Virgin Purge – Conservation Vents Gasoline Tanks - Submerged Fill	40 CFR 60 Subpart Kb 401 KAR 59:050
D07	Backup Generators utilizing #2 Fuel Oil (Insignificant Activities List) Two (2) Backup Generators (6.0 MMBtu/hr each) One (1) Backup Generator (10.2 MMBtu/hr) One (1) Backup Generator (0.8 MMBtu/hr) Two (2) Backup Generators (2.4 MMBtu/hr each) One (1) Backup Generator (6.0 MMBtu/hr) Mobile Unit	August 27, 1992 July 17, 1986 July 17, 1986 2002 2003	None None None None None	
D08	Miscellaneous Combustion Sources, including:			
	Indirect Heat Exchangers $\leq$ 1 MMBtu/hr (Insignificant Activities List)	1986 - 1999	None	

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Regulatory Details:

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act) ; and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:015, New Indirect Heat Exchangers. The provisions of this regulation apply to each affected facility commenced on or after April 9, 1972 (affected facilities with a heat input capacity of 250 MM Btu/hr or less, with respect to particulate and sulfur dioxide emissions).

### 1. Operating Limitations:

The affected facilities shall be operated so as not to exceed the emission limitations in Section B.2.

#### **Specific Operating Limitations for Emission Unit D06:**

Pursuant to 401 KAR 59:050, Section 2, The gasoline storage tanks, T5311, T5312, T800-B1, T800-3 and T800-4, shall be equipped with submerged fill pipes, and a vapor balance system for gasoline truck unloading. Tank trucks shall not be unloaded unless they are properly connected to the vapor balance system.

### 2. Emission Limitations:

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Facilities Control Operations of more than the following emissions.

<b>D01 - Utility Boilers (545 MMBTU/HR)</b>		
<b>Allowable Emission Rates (lb/MMBTU Heat Input)</b>		
<b>Pollutant</b>	<b>Natural Gas<sup>1</sup></b>	<b># 2 Oil<sup>2</sup></b>
PM	$7.45 \times 10^{-3}$	$1.43 \times 10^{-2}$
SO <sub>2</sub>	$5.88 \times 10^{-4}$	$3.04 \times 10^{-1}$
NO <sub>x</sub>	$4.90 \times 10^{-2}$	$1.43 \times 10^{-1}$
CO	$8.24 \times 10^{-2}$	$3.57 \times 10^{-2}$
VOC <sup>3</sup>	$5.39 \times 10^{-3}$	$1.80 \times 10^{-3}$
Reference Permit # C-86-117 (Revision 2)		
<sup>1</sup> Limits are based on July 1998 ed. of AP-42		
<sup>2</sup> Limits are based on September 1998 ed. of AP-42		
<sup>3</sup> #2 Oil limit is based AP-42 TOC Emission Factor for distillate oil fired industrial boilers		

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

Fuels are limited to Natural Gas and #2 Fuel Oil. Utility Boilers will utilize low NO<sub>x</sub> burners. The sulfur content of the #2 fuel oil used in the boilers shall not exceed 0.30% by weight.

#### **Compliance Demonstration Method:**

Indirect Heat Exchangers included in Emission D01 are considered to be in compliance with the SO<sub>2</sub> standard when burning 0.3% sulfur content #2 fuel oil.

See Testing Requirements

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Facilities Control Operations of more than the following emissions.

<b>D03 - Indirect Heat Exchangers &gt; 1 MMBTU/HR</b>	
<b>Line 2 (690 MMBTU/HR)</b>	
<b>Allowable Emission Rates (Tons/Year)</b>	
<b>Pollutant</b>	<b>Natural Gas</b>
PM	13.1
SO <sub>2</sub>	1.0
NO <sub>x</sub>	172.3
CO	144.7
VOC	9.5
Reference Permit # F-99-029	

#### **Compliance Demonstration Method:**

$$ER = (HI) \times \left( \frac{AP - 42EF}{HVNG} \right) \times \left( \frac{\text{Hours of Operation}}{\text{Year}} \right) \times \left( \frac{1 \text{ Ton}}{2000 \text{ lb}} \right)$$

Where

ER = Pollutant Emission Rate (Tons/Year)

HI = Heat Input (MMBTU/HR)

AP-42EF = Most recently finalized AP-42 Emission Factor (lb/MMSCF)

HVNG = Heating Value of Natural Gas Used (MMBTU/MMSCF)

#### **Specific Emission Limitations for Emission Unit D01 and D03 (Indirect Heat Exchangers Only):**

- Pursuant to 401 KAR 59:015, Section 4(2), emissions from each unit shall not exceed 20% opacity.
- Indirect Heat Exchangers included in Emission Unit D01 are considered to be in compliance with the PM, SO<sub>2</sub>, and opacity standards while burning natural gas.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):**

**401 KAR 59:015 §3** The permittee shall not cause, suffer, allow or permit the emission into the open air, not more than the following:

EMISSION UNIT	OPERATION	PM LIMIT (lb / MMBtu)	SO <sub>x</sub> LIMIT (lb / MMBtu)
D03	Indirect Heat Exchangers > 1 MM Btu/hr	0.1	0.8

**Specific Emission Limitations for Indirect Heat Exchangers in Emission Unit D03:**

a. Pursuant to 401 KAR 59:015, Section 4(1)(b), Particulate emissions shall not exceed 0.1 lb/MMBTU.

**Compliance Demonstration Method:**

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formula.

When combusting natural gas:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (the heating value of the natural gas used in mmBTU /10<sup>6</sup>scf)].

b. Pursuant to 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 0.8 lb/mmBTU.

**Compliance Demonstration Method:**

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formula.

When combusting natural gas:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the natural gas used in mmBTU /10<sup>6</sup> scf)].

**3. Testing Requirements:****Specific Testing Requirements for each Utility Boiler in Emission Unit D01:**

- a. When fuel oil is combusted, the permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 weekly, or more frequently if requested by the Division.
- b. The permittee shall conduct an initial performance test for each stack of Emission Unit D01 for Boiler 1 and one representative of Boilers 2 through 6 that are combusting fuel oil if such usage exceeds 60 days within any consecutive twelve months period. The performance test shall consist of the following:
  1. EPA Reference Method 2A or equivalent shall be performed to determine the flow rate of stack gas.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements(Continued):****Specific Testing Requirements for each Utility Boiler in Emission Unit D01:**

2. EPA Reference Method 5 or equivalent shall be performed to determine the combined pounds of PM emissions per million BTU of fuel oil burned.
  3. EPA Reference Method 7 or equivalent shall be performed to determine the pounds of NO<sub>x</sub> emissions per million BTU of fuel oil burned.
  4. EPA Reference Method 10 or equivalent shall be performed to determine the pounds of CO emissions per million BTU of fuel oil burned.
  5. EPA Reference Method 18, Method 25A, or equivalent shall be performed to determine the amount of VOC emissions per million BTU of fuel oil burned.
- c. The permittee shall conduct an initial performance test for natural gas combustion for Boiler 1 and one representative of Boilers 2 through 6 for each stack included in emission D01 within 180 days of the issuance of the permit. The performance test shall consist of the following:
1. EPA Reference Method 2A or equivalent shall be performed to determine the flowrate of stack gas.
  2. EPA Reference Method 7 or equivalent shall be performed to determine the pounds of NO<sub>x</sub> emissions per million BTU of natural gas burned.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

**Specific Monitoring Requirements for Emission Units D01 and D03:**

- a. The permittee shall monitor the volume of natural gas usage and #2 fuel oil. Following the end of each month the volume of natural gas and #2 fuel oil for each boiler specified in emission unit D01 and for each building specified in the Periodic Monitoring Requirements Table included in emission unit D03 shall be calculated on a twelve-month rolling average and recorded.
- b. The permittee shall monitor the sulfur content of fuel oil combusted. The permittee may use the certification from the fuel supplier to satisfy this requirement. The fuel supplier certification shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of fuel oil specified in the regulation.

**Specific Monitoring Requirements for Emission Unit D07:**

The permittee shall monitor the hours of operation for each back-up generator listed in Emission Unit D07.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained onsite for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**Specific Recordkeeping Requirements for Emission Units D01 and D03:**

- a. The permittee shall maintain records of volume of natural gas and #2 fuel oil burned for each boiler specified in emission unit D01 and for each building with affected facilities included in emission unit D03. These records shall represent the most recent year. Following the end of each month, PM, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emissions shall be calculated on a twelve-month rolling average and recorded.
- b. The permittee shall maintain records of the sulfur content of each shipment of #2 fuel oil.
- c. The permittee shall maintain records of the AP-42 emission factors and heating value of natural gas used in the compliance demonstration for unit D03. The compliance demonstration records shall be updated if these values change.

**Specific Recordkeeping Requirements for Emission Unit D06:**

See 40 CFR 60 Subpart Kb, Section 116b.

**Specific Recordkeeping Requirements for Emission Unit D07:**

The permittee shall maintain records of the hours of operation for each back-up generator listed in Emission Unit D07.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

10. Compliance Certification Requirements:  
N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****FACILITIES CONTROL - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
D01	Boilers	#2 Fuel Oil	Sulfur Content	Sulfur Content	Analysis	Each Shipment	Each Shipment	N/A	0-0.3%
D01	Boilers	50 MMBTU/hr Boiler 1 #2 Fuel Oil	Volume used	Gallons		Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 2 #2 Fuel Oil	Volume used	Gallons		Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 3 #2 Fuel Oil	Volume used	Gallons		Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 4 #2 Fuel Oil	Volume used	Gallons		Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 5 #2 Fuel Oil	Volume used	Gallons		Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 6 #2 Fuel Oil	Volume used	Gallons		Monthly	Monthly	N/A	N/A
D01	Boilers	50 MMBTU/hr Boiler 1 Natural Gas	Volume used	Standard Cubic Feet (SCF)	N/A	Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 2 Natural Gas	Volume used	Standard Cubic Feet (SCF)	N/A	Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 3 Natural Gas	Volume used	Standard Cubic Feet (SCF)	N/A	Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 4 Natural Gas	Volume used	Standard Cubic Feet (SCF)	N/A	Monthly	Monthly	N/A	N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
D01	Boilers	99 MMBTU/hr Boiler 5 Natural Gas	Volume used	Standard Cubic Feet (SCF)	N/A	Monthly	Monthly	N/A	N/A
D01	Boilers	99 MMBTU/hr Boiler 6 Natural Gas	Volume used	Standard Cubic Feet (SCF)	N/A	Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 1)	Building 100 Natural Gas	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 1)	Building 200 Natural Gas	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 1)	Building 300 Natural Gas	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 1)	Building 400 Natural Gas	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 1)	Building 601/602 Natural Gas	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 1)	Building Fit Center Natural Gas	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 2)	Natural Gas Building 800	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 2)	Natural Gas Building 2000	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 2)	Natural Gas Building 3000	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 2)	Natural Gas Building 100A	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A
D03	Indirect Heat Exchangers >1 MMBTU (Plant 2)	Natural Gas Building 400A	Volume used	Standard Cubic Feet (SCF)		Monthly	Monthly	N/A	N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
D06	Bulk / Tank Farm Storage (gasoline and virgin purge only)	Conservation Valve	Valve Function	Movement	Visual	Annual	Annual	N/A	Operational
D07	Back-up Generators	Back-up Generators	Hours of Operation per generator	Hours of Operation per generator		Monthly	Monthly		<2000 Hours per year per generator

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**PAINT #1**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**PAINT #1, 200 BUILDING, Operations include the following processes**

EMISSION UNIT	OPERATION <sup>1</sup>	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
E01	Phosphate System, including de-greasing tank, rinse tanks, and phosphate dip tank	July 17, 1986	None	
E02	Electro deposition Coating System, including rinse tanks, dip tank, dry sanding, and oven	July 17, 1986	Oven – Recuperative Thermal Oxidizer TT01 for VOC	401 KAR 60:005
E03	Metal Finishing Line, including metal assembly (Insignificant Activities List)	July 17, 1986	None	
E04	Sealer Line and Oven, including:			
	Solvent Wiping Stations	July 17, 1986	None	
	Seam Sealer Stations (robot and manual application)	July 17, 1986	None	
	Damping Coat Area	Jan 2004	None	
	Antichip Booth (rocker and wheel)	July 17, 1986	None	401 KAR 60:005
	PVC Booths (underbody and touch-up)	July 17, 1986	None	
	Bake Oven	July 17, 1986	Catalytic Incinerator TI02 for VOC	
E05	Primer Booth and Oven, including:			

1-All processes exclude non-process cleaning activities, except emission unit E13.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION <sup>1</sup>	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
	Solvent Wiping and Blow-off	July 17, 1986	None	
	Soft Chip	July 17, 1986	Scrubber TS03 & Filter TF02 for PM VOC Carryover to Oven Incinerator	401 KAR 60:005
	Exterior	July 17, 1986	Scrubber TS03 & Filter TF02 for PM VOC Carryover to Oven Incinerator	401 KAR 60:005
	Interior	July 17, 1986	Scrubber TS03 & Filter TF02 for PM VOC Carryover to Oven Incinerator	401 KAR 60:005
	Doorsash and Rocker	July 17, 1986	Scrubber TS03 & Filter TF02 for PM VOC Carryover to Oven Incinerator	401 KAR 60:005
	Oven	July 17, 1986	Catalytic Incinerator TI03 for VOC	
E06	Wet Sand Line, including wet sand and dry sand booth, re-coat dry sand booth, touch-up booth and oven	July 17, 1986	None	
E07	Topcoat Lines A, B, and C, including:			
	Solvent Wiping and Blow-off Area	July 17, 1986	None	
	All Coating Applications, Lines A, B, & C	July 17, 1986	Booth A – Filter TF03 for PM Booth B – Filter TF04 for PM Booth A – Scrubber TS07 for PM Booth B – Scrubber TS08 for PM Booth C – Scrubber TS09 for PM VOC Carryover to Oven Incinerators	401 KAR 60:005
	Bake Ovens A, B, C	July 17, 1986	Oven A – Cat Incin TI04 for VOC Oven B – Cat Incin TI05 for VOC Oven C – Cat Incin TI06 for VOC	401 KAR 60:005
E08	Inspection Lines (Insignificant Activities List)	July 17, 1986	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>EMISSION UNIT</b>	<b>OPERATION<sup>1</sup></b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
E09	Blackout Coating, including grille blackout, wheelhouse blackout and windshield blackout	July 17, 1986	Grille and Wheelhouse - Scrubber TS10 for PM	401 KAR 60:005
E10	Moon Roof Installation (Insignificant Activities List)	July 17, 1986	None	
E11	Wax Coating, including cavity wax, hinge wax and spot wax	July 17, 1986	None	
E12	Repair Deck Operations, including ED, sealer, primer, topcoat and blackout repairs	July 17, 1986	None	401 KAR 60:005
E13	Non-Process Cleaning Activities, including caustic stripping, grate coating, water blasting, line purging, shot blasting, and surface cleaning	July 17, 1986	None	401 KAR 59:185
E14	Raw Material Supply Systems, including ED system supply and paint mix/supply rooms	July 17, 1986	None	
E15	Water/Wastewater Treatment Operations, including all De-ionizing processes and sludge pool processes	July 17, 1986	None	
E16	Robot Teaching Booth (Insignificant Activities List)	July 17, 1986	None	
E17	Two Tone Masking Booth (Insignificant Activities List)	July 17, 1986	None	
E18	General Exhaust	July 17, 1986	None	



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act) ; and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 60:005, Standards of performance for automobile and light-duty truck surface coating operations incorporating by reference 40 CFR 60.390 – 60.398 (Subpart MM) applicable to each prime coat operation, guide coat operation, and each topcoat operation that begins construction, modification, or reconstruction after October 5, 1979. (See Section D).

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks – Compliance Date, April 26, 2007.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers' recommendations and/or good engineering practice.

The permittee shall conform to the operating conditions, as prescribed in the periodic monitoring requirements table.

**Specific Operating Limitations for Thermal Oxidizers:**

**A.** The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum set point temperature.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations(Continued):****Specific Operating Limitations for Thermal Oxidizers (Continued):****Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required in the Periodic Monitoring Requirements table, averaged over 3 hours.

**Specific Operating Limitations for Catalytic Incinerators:**

**A.** The average temperature immediately before the catalyst bed in any 3-hour period shall not fall more than 28°C (50°F) below the limit established during the most recent performance test, which demonstrated compliance.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed. This average temperature is the minimum set point for the catalytic incinerator. The minimum-operating limit for catalytic oxidizers is 28°C (50°F) below the minimum set point for the catalytic incinerator.

**Compliance Demonstration Method:** Compliance shall be demonstrated by monitoring and recording the temperature just before the catalyst bed as required by the Periodic Monitoring Requirements table, averaged over 3 hours.

**C.** The permittee must develop and implement an inspection and maintenance plan for its catalytic oxidizer(s). The plan must address, at a minimum, the elements specified in paragraphs (C)(i) through (C)(iii) of this section.

**(i)** Annual sampling and analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, the permittee must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.

**(ii)** Monthly external inspection of the catalyst oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

**(iii)** Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, the permittee must replace the catalyst bed or take other corrective action. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst then the permittee must conduct a new performance test to determine destruction efficiency according to Section D.3 of this permit and 40 CFR 60 Subpart A, General Provisions. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and the permittee may continue to use the previously established operating limits for that catalytic oxidizer.

**Specific Operating Conditions for Purging Solvents:**

Except for applicator nozzles/tips, coating applicator purging solvents shall be collected and retained until such time as they are shipped offsite for disposal or recycled. Waste purge solvent tanks shall be kept closed when not in use.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations(Continued):****Specific Operating Limitations for Emission Unit E13:****401 KAR 59:185: § 4**, Cold Cleaners (applies to batch degreasers)

Control Equipment Specifications:

- (a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.
- (b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.
- (c) On all containers, a label must be on or near the cleaner.
- (d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

Operating Requirements:

- (a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.
- (b) The degreaser cover shall be closed when parts are not being handled in the cleaner.
- (c) Cleaned parts shall be drained until dripping stops.

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.

**2. Emission Limitations:****401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See periodic monitoring requirements table.

**401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate in pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method:****401 KAR 59:010 §3**

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

- (1) For affected facilities that use transfer efficiency in the determination of PM/PM<sub>10</sub> emissions the permittee shall:

- (i) Use the transfer efficiency value specified in 40 CFR 60.393 for the application method used; or
- (ii) Use a transfer efficiency value determined through testing approved by the Division.

Previous transfer efficiency tests may be accepted if the following conditions are met:

- (a) The previous test must have been conducted using methods and conditions approved by the Division.
- (b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.
- (c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

- (2) Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):****401 KAR 59:010 §3**

For affected facilities with periodic monitoring requirements for particulate emissions the source shall demonstrate continuous compliance by adhering to the periodic monitoring requirements table. The source must maintain a record of deviations from “standard ranges” in the periodic monitoring requirements table and determine the particulate emissions from the deviation. The duration of the deviation shall be the period between when the “out of standard condition” was noted and when it is corrected. If an engineering evaluation utilizing a control efficiency is used to determine particulate emissions for the affected facility, the allowed control efficiency shall be zero during the deviation period unless testing is conducted to prove otherwise. Engineering evaluations for affected facilities with control equipment that utilize a particulate emission rate based on test data must back calculate the control efficiency so that in the event of “out of standard conditions”, the permittee can determine “E”.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
E01	Phosphate System	N/A	0.54
E02	Electro deposition System	0.185	N/A
E04	Sealer Line/Oven	1.15	4.13
E05	Primer Line/Oven	2.11	4.02
E06	Wet Sand Line/Oven	0.13	0.35
E07	Topcoat A,B,C Booth/Oven	3.86	7.43
E09	Blackout Coating	0.11	0.59
E11	Wax Coating	0.27	1.33
E12	Repair Coating and Sanding	N/A	0.93
E13	Non-Process Cleaning Activities	3.09	0.26
E14	Raw Material Supply	N/A	2.23
E15	Water/Wastewater Treatment	N/A	1.63
E18	General Exhaust	N/A	1.02

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method:**

VOC Value =  $\text{SUM } (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) / P$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (number of vehicles produced)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM } (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack "i".

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Paint #1 Operations of more than 1,865 tons per year of VOC emissions, based on a 12-month rolling average.

**Compliance Demonstration Method:**

VOC Value =  $\text{SUM } (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Paint #1 Operations of more than 59.1 tons per year of PM emissions, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

1) Calculated from the following equation, except where testing specified (see item 2)

PM Value =  $\text{SUM } (P \times E_i)$ ,

$P$  = Average shop production throughput

$E_i$  = PM Emission Factor (controlled) for "i",

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

2) Testing, see periodic monitoring requirements table.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****40 CFR 60 Subpart MM - 60.392:**

The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

<b>NSPS CATEGORY</b> (Affected Facilities)	<b>EMISSION LIMIT</b> (kg VOC per liter solid applied)	<b>COATINGS INCLUDED IN GROUP</b>
<b>(a)</b> - Primecoat Operations	0.17	E02 - Electro deposition
<b>(b)</b> - Guidecoat Operations	1.40	E04 - Antichip Booth E05 - Soft Chip, Interior, Exterior
<b>(c)</b> - Topcoat Operations	1.47	E05 - Doorsash and Rocker Panel Black E07 - Topcoat Solid, Base, Clear E09 - Blackouts

**Compliance Demonstration Method:**

See Section D.4

**3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

See Section D.4 and D.5

The permittee shall perform Method 5 (particulate matter) and Method 9 (opacity) tests for the entrance/exit hoods of emission units E02, E04, E05 and E07. Representative testing of emissions units that are similar in design will be allowed when approved by the Division. The permittee shall submit a compliance schedule for the testing to the Division within 90 days of the issuance of this permit.

The permittee shall perform a Method 5 (particulate matter) test on the antichip booth and underbody PVC booth (included in emission unit E04). The permittee shall submit a compliance schedule for the testing to the Division within 90 days of the issuance of this permit.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in the Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

See Section D.4

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**Specific Monitoring Requirements for Emission Units E02, E04, E05 and E07:**

An alarm system shall be installed on emission units E02, E04, E05 and E07 which will notify the operator of the units in the event the burner temperature of the incinerator falls below indicator range as prescribed by periodic monitoring requirements table.

**5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

See Section D.4

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers and catalytic incinerators, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements (Continued):****Thermal Oxidizer Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
2. During all periods of operation of the thermal oxidizer in which the 3-hour average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test which demonstrated compliance, or other malfunction of the thermal oxidizer, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the thermal oxidizer.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. Corrective action(s) taken shall be recorded.

**Catalytic Incinerator Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the catalytic incinerator:

1. All 3-hour periods (during coating operations) during which the average temperature immediately before the catalyst bed is more than 28°C (50°F) below the average temperature immediately before the catalyst bed determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
3. All 3-hour periods (during coating operations) which the 3-hour average temperature immediately before the catalyst bed is more than 28°C (50°F) below the average temperature immediately before the catalyst bed determined during the most recent performance test which demonstrated compliance, or other malfunction of the catalytic incinerator, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the catalytic incinerator.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. The corrective action(s) taken shall be recorded.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements (Continued):**

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

See Section D.4

All records required by this permit shall be kept onsite for a minimum of 5 years.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

See Section D.4

**7. Specific Control Equipment Operating Conditions:**

See Section B.1

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

The permittee shall submit a compliance schedule for all required transfer efficiency, carry over efficiency and capture efficiency tests to the Division 90 days after issuance of the permit. The Compliance schedule shall specify the emission units and machine points that are to be tested and the proposed test date.

See Section D.5

The permittee shall submit a site specific inspection and maintenance plan for all catalytic oxidizers within ninety (90) days after issuance of the permit.

**10. Compliance Certification Requirements:**

See Section B.2 and B.6 for compliance demonstration methods and reporting requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****PAINT #1 - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
E02	Electrodeposition -Oven	Thermal Oxidizer (TT01)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
E02	Electrodeposition -Oven	Thermal Oxidizer (TT01)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
E02	Electrodeposition -Oven	Thermal Oxidizer (TT01)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 80%
E04	Sealer-Oven	Catalytic Incinerator (TI02)	Incinerator Collection	Entrance/Exit Hood By-Pass Damper Position (confirmation)	Visual	Weekly	Weekly	N/A	Correct Position
E04	Sealer-Oven	Catalytic Incinerator (TI02)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every Catalyst Change (See Section B.1.C.3)	Every Catalyst Change (See Section B.1.C.3)	Each Test	DRE > 80%
E04	Sealer-Oven	Catalytic Incinerator (TI02)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
E04	Sealer-Oven	Catalytic Incinerator (TI02)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
E05	Primer-Booth	Booth Scrubber (TS03)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
E05	Primer-Booth	Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 Years*	Every 5 Years*	Each Test	See Section B.2
E05	Primer-Booth	Mix Room Systems	VOC Emission	Material Usage	Material Balance	Monthly	Monthly	N/A	See VOC Limit, Section B.2
E05	Primer-Booth	Exhaust Filters (Final Stage) (TF02)	Filter Condition	Press Drop	Gauge	Continuous	Daily**	Annual	0 - 60 mm H <sub>2</sub> O
E05	Primer-Booth	Exhaust Filters (TF02)	Filter Condition	All Final Filters In Place	Visual	Monthly	Monthly	N/A	No Visible By-Pass
E05	Primer-Oven	Catalytic Incinerator (TI03)	Destruction Efficiency	VOC In/Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 90%
E05	Primer-Oven	Catalytic Incinerator (TI03)	Incinerator Collection	Entrance/Exit Hood By-Pass Damper Position (confirmation)	Visual	Weekly	Weekly	N/A	Correct Position
E05	Primer-Oven	Catalytic Incinerator (TI02)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every Catalyst Change (See Section B.1.C.3)	Every Catalyst Change (See Section B.1.C.3)	Each Test	DRE > 90%
E05	Primer-Oven	Catalytic Incinerator (TI03)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
E05	Primer-Oven	Catalytic Incinerator (TI03)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
E07	Topcoat Booths (A, B, & C)	Mix Room Systems	VOC Emission	Material Usage	Material Balance	Monthly	Monthly	N/A	See VOC Limit, Section B.2
E07	Topcoat Booths (A & B)	Exhaust Filters (TF03, TF04)	Filter Condition	All Final Filters In Place	Visual	Monthly	Monthly	N/A	No Visible By-Pass
E07	Topcoat Booths (A & B)	Exhaust Filters (TF03, TF04)	Filter Condition	Pressure Drop	Gauge	Continuous	Daily**	Annual	0 - 60 mm H <sub>2</sub> O
E07	Topcoat Booths (A, B, & C)	Booth Scrubber (TS07, TS08, TS09)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps
E07	Topcoat Booths (A, B, & C)	Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 Years*	Every 5 Years*	Each Test	See Section B.2
E07	Topcoat Ovens (A, B, & C)	Catalytic Incinerator (TI04, TI05, TI06)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every Catalyst Change	Every Catalyst Change (See Section B.1.C.3)	Each Test	DRE > 90%
E07	Topcoat Ovens (A & B)	Catalytic Incinerator (TI04, TI05, TI06)	Incinerator Collection	Entrance/Exit Hood By-Pass Damper Position (confirmation)	Visual	Weekly	Weekly	N/A	Correct Position
E07	Topcoat Ovens (A, B, & C)	Catalytic Incinerator (TI04, TI05, TI06)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
E07	Topcoat Ovens (A, B, & C)	Catalytic Incinerator (TI04, TI05, TI06)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
E09	Blackout Coating	Booth Scrubber (TS10)	PM Removal Efficiency	Water Flow	Visual	Weekly	Weekly	N/A	No significant gaps
E13	Non-process Cleaning Activities (Purge Recovery)	Waste Purge Tank	VOC Emission Credit	Recovered Purge	Meter	Monthly	Monthly	Annual	See Permit Limit Section B.2
E13	Non-process Cleaning Activities (Purge Recovery)	Virgin Purge Tank	VOC Emission	Virgin Purge	Meter (Primary)	Monthly	Monthly	Annual	See Permit Limit Section B.2

**\*No later than year 3 of this permit.**

**\*\*“Daily” means on calendar days when the process unit is in operation for part or all of the day.**

**\*\*\*Excursions from temperature standard ranges are based upon 3-hour averages. Averages of data readings need only be recorded for those 3-hour rolling periods in which an excursion occurs.**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**PAINT #2**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**PAINT #2, 2000 BUILDING**, Operations include the following processes

EMISSION UNIT	OPERATION <sup>3</sup>	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
F01	Phosphate System, including de-greasing tank, rinse tanks, and phosphate dip tank (Insignificant Activities List)	March 22, 1991	None	
F02	Electro deposition Coating System, including rinse tanks, dip tank, dry sanding, and oven	March 22, 1991	Oven - Thermal Oxidizer TT02 for VOC	401 KAR 60:005
F03	Metal Finishing Line, including metal assembly (Insignificant Activities List)	March 22, 1991	None	
F04	Sealer Line and Oven, including:			
	Solvent Wiping Areas	March 22, 1991	None	
	Seam Sealer Area (robot and manual application)	March 22, 1991	None	
	Damping Coat Area	2004	None	
	Antichip Booth (rocker and wheel)	March 22, 1991	None	401 KAR 60:005
	PVC Booths (underbody and touch-up)	March 22, 1991	None	
	Bake Oven	March 22, 1991	Thermal Oxidizer TT03 for VOC	

<sup>3</sup> -All processes exclude non-process cleaning activities, except emission unit F13.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION <sup>3</sup>	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
F05	Primer Booth and Oven, including:			
	Solvent Wiping and Blow-off	March 22, 1991	None	
	Soft Chip	March 22, 1991	Scrubber TS19 for PM VOC Carryover to Carbon/ Thermal Oxidizer VOC Carryover to Oven Incinerator	401 KAR 60:005
	Exterior	March 22, 1991	Scrubber TS19 for PM Carbon TC01 for VOC ThOxidizer TT04 for VOC VOC Carryover to Oven Incinerator	401 KAR 60:005
	Interior	March 22, 1991	Scrubber TS19 for PM VOC Carryover to Oven Incinerator	401 KAR 60:005
	Doorsash and Rocker	March 22, 1991	Scrubber TS19 for PM VOC Carryover to Oven Incinerator	401 KAR 60:005
	Oven	March 22, 1991	Thermal Oxidizer TT05 for VOC	
F06	Wet Sand Line, including wet sand and dry sand booth, re-coat dry sand booth, touch-up booth and oven	March 22, 1991	None	
F07	Topcoat Lines A, B, and C, including:			
	Solvent Wiping and Blow-off Area	March 22, 1991	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION <sup>3</sup>	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
	All Coating Applications, Lines A, B, & C	March 22, 1991	Booth A – Scrubber TS23 for PM Booth B – Scrubber TS24 for PM Booth C – Scrubber TS25 for PM Booth A – Carbon TC02 for VOC Booth B – Carbon TC03 for VOC Booth C – Carbon TC04 for VOC Booth A – ThOxidizer TT06 for VOC Booth B – ThOxidizer TT08 for VOC Booth C – ThOxidizer TT10 for VOC Booths A/B/C – VOC Carryover to Oven Incinerators	401 KAR 60:005
	Bake Ovens A, B, C	March 22, 1991	Thermal Oxidizer A,B,C for VOC Oven A – ThOxidizer TT07 for VOC Oven B – ThOxidizer TT09 for VOC Oven C – ThOxidizer TT11 for VOC	401 KAR 60:005
F08	Inspection Lines (Insignificant Activities List)	March 22, 1991	None	
F09	Blackout Coating, including grille blackout, wheelhouse blackout and windshield blackout and touch-up station	March 22, 1991	Blackout Booth - Scrubber TS26 for PM Touchup Station – Filter TF12 for PM	401 KAR 60:005
F10	Moon Roof Installation (Insignificant Activities List)	March 22, 1991	None	
F11	Wax Coating, including cavity wax, hinge wax and spot wax	March 22, 1991	None	
F12	Repair Deck Operations, including ED, sealer, primer, topcoat and blackout repairs	March 22, 1991	None	401 KAR 60:005
F13	Non-Process Cleaning Activities, including, grate coating, water blasting, line purging, and surface cleaning	March 22, 1991	None	401 KAR 59:185

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>EMISSION UNIT</b>	<b>OPERATION<sup>3</sup></b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
F14	Raw Material Supply Systems, including ED system supply and paint mix/supply rooms (Insignificant Activities List)	March 22, 1991	None	
F15	Water/Wastewater Treatment Operations, including all De-ionizing processes and sludge pool processes (Insignificant Activities List)	March 22, 1991	None	
F16	Robot Teaching Booth (Insignificant Activities List)	March 22, 1991	None	
F17	Two Tone Masking Booth (Insignificant Activities List)	March 22, 1991	None	
F18	General Exhaust	March 22, 1991	None	

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act) ; and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 60:005, Standards of performance for automobile and light-duty truck surface coating operations incorporating by reference 40 CFR 60.390 – 60.398 (Subpart MM) applicable to each prime coat operation, each guide coat operation, and each topcoat operation that begins construction, modification, or reconstruction after October 5, 1979. (See Section D).

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Part 64, Compliance Assurance Monitoring.

40 CFR Parts 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks – Compliance Date, April 26, 2007.

### **1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers' recommendations and/or good engineering practice.

The permittee shall conform to the operating conditions, as prescribed in the periodic monitoring requirements table.

#### **Specific Operating Limitations for Thermal Oxidizers:**

**A.** The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum setpoint temperature.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations(Continued):****Specific Operating Limitations for Thermal Oxidizers(Continued):****Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Limitations for Carbon Wheel Concentrators:**

**A.** The permittee must keep the set point for the desorption gas inlet temperature no lower than 17°C (30°F) below the lower of that set point during the last successful performance test for the concentrator and the average desorption gas inlet temperature established during the performance test.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average desorption gas inlet temperature. The minimum-operating limit for the concentrator is 17°C (30°F) below the set point gas inlet temperature established during the performance test.

**Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the desorption gas inlet temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Limitations for Emission Unit F13:**

**401 KAR 59:185: § 4, Cold Cleaners (applies to batch degreasers)**

**Control Equipment Specifications:**

(a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.

(b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.

(c) On all containers, a label must be on or near the cleaner.

(d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

**Operating Requirements:**

(a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.

(b) The degreaser cover shall be closed when parts are not being handled in the cleaner.

(c) Cleaned parts shall be drained until dripping stops.

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations(Continued):****Specific Operating Conditions for Purging Solvents:**

Except for applicator nozzles/tips, coating applicator purging solvents shall be collected and retained until such time as they are shipped offsite for disposal or recycled. Waste purge solvent tanks shall be kept closed when not in use.

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See periodic monitoring requirements table.

**401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials;  
or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**Compliance Demonstration Method:**

(1) For affected facilities that use transfer efficiency in the determination of PM/PM<sub>10</sub> emissions the permittee shall:

- (i) Use the transfer efficiency value specified in 40 CFR 60.393 for the application method used; or
- (ii) Use a transfer efficiency value determined through testing approved by the Division.

Previous transfer efficiency tests may be accepted if the following conditions are met:

- (a) The previous test must have been conducted using methods and conditions approved by the Division.
- (b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):****401 KAR 59:010 §3**

(c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

- (2) Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

For affected facilities with periodic monitoring requirements for particulate emissions the source shall demonstrate continuous compliance by adhering to the periodic monitoring requirements table. The source must maintain a record of deviations from "standard ranges" in the periodic monitoring requirements table and determine the particulate emissions from the deviation. The duration of the deviation shall be the period between when the "out of standard condition" was noted and when it is corrected. If an engineering evaluation utilizing a control efficiency is used to determine particulate emissions for the affected facility, the allowed control efficiency shall be zero during the deviation period unless testing is conducted to prove otherwise. Engineering evaluations for affected facilities with control equipment that utilize a particulate emission rate based on test data must back calculate the control efficiency so that in the event of "out of standard conditions", the permittee can determine "E".

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
F02	Electro Dip System	0.19	0.22
F04	Sealer Line/Oven	1.15	0.89
F05	Primer Line/Oven	2.73	1.91
F06	Wet Sand Line/Oven	0.13	0.53
F07	Topcoat A,B,C Booth/Oven	3.86	7.42
F09	Blackout Coating	0.55	0.22
F11	Wax Coating	0.27	N/A
F12	Repair Coating and Sanding	N/A	0.18
F13	Non-Process Cleaning Activities	3.09	1.00
F18	General Exhaust	N/A	1.00

### **Compliance Demonstration Method:**

VOC Value =  $\text{SUM } (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) / P$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (number of vehicles produced)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM } (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack "i".

See Compliance Demonstration Method for 401 KAR 59:010, this Section.



## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Paint #2 Operations of more than 1,571 tons per year of VOC emissions, based on a 12-month rolling average.

**Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$  ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Paint #2 Operations of more than 60.62 tons per year of PM emissions, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

1) Calculated from the following equation, except where testing specified (see item 2)

PM Value =  $\text{SUM} (P \times E_i)$  ,

$P$  = Average shop production throughput

$E_i$  = PM Emission Factor (controlled) for "i",

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

2) Testing, see periodic monitoring requirements table.

### **40 CFR 60 Subpart MM - 60.392:**

The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

NSPS CATEGORY (Affected Facilities)	EMISSION LIMIT (kg VOC per liter solid applied)	COATINGS INCLUDED IN GROUP
(a) - Primecoat Operations	0.17	F02 - Electro deposition
(b) - Guidecoat Operations	1.40	F04 - Antichip Booth F05 - Soft Chip, Interior, Exterior
(c) - Topcoat Operations	1.47	F05 - Doorsash and Rocker Panel Black F07 - Topcoat Solid, Base, Clear F09 - Blackouts

**Compliance Demonstration Method:**

See Section D.4

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4. See Section D.4 and D.5

The permittee shall perform Method 5 (particulate matter) and Method 9 (opacity) tests for the entrance/exit hoods of emission units F02, F04, F05 and F07. Representative testing of emissions units that are similar in design will be allowed when approved by the Division. The permittee shall submit a compliance schedule for the testing to the Division within 90 days of the issuance of this permit.

The permittee shall perform a Method 5 (particulate matter) test on the antichip booth (included in emission unit F04). The permittee shall submit a compliance schedule for the testing to the Division within 90 days of the issuance of this permit.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in the Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

See Section D.4

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**Specific Monitoring Requirements for Emission Units F02, F04, F05 and F07:**

An alarm system shall be installed on emission units F02, F04, F05 and F07 which will notify the operator of the units in the event the burner temperature of the incinerator falls below indicator range as prescribed by periodic monitoring requirements table.

**Specific Monitoring Requirements for Carbon Concentrators:**

The performance of the adsorbent material will be verified by examining representative samples and testing the performance (adsorbent activity) per the manufacturer's recommendation. The results shall be assessed (e.g., compared to historical results and/or results for new adsorbent) and the adsorbent shall be replaced as appropriate.

Alternatively, performance can be checked with a portable flame ionization detector (FID), photo ionization detector (PID), or other appropriate equipment or methodologies. In this case, the concentration of the adsorber outlet stream, or the percent reduction in concentration of the inlet/outlet stream measurements are compared to historical data from performance tests. The results shall be assessed and the adsorbent shall be replaced as appropriate.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

See Section D.4

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers and carbon wheel concentrators, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

**Thermal Oxidizer Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
2. During all periods of operation of the thermal oxidizer in which the 3-hour average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test which demonstrated compliance, or other malfunction of the thermal oxidizer, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the thermal oxidizer.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. Corrective action(s) taken shall be recorded.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements (Continued):****Carbon Wheel Concentrator Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the carbon wheel concentrator:

1. All periods (during coating operations) during which the 3-hour average desorption gas inlet temperature is more than 17°C (30°F) below the average desorption gas inlet temperature determined during the most recent performance test, which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
2. During all periods of operation of the carbon wheel concentrator in which the 3-hour average desorption gas inlet temperature is more than 17°C (30°F) below the average desorption gas temperature determined during the most recent performance test which demonstrated compliance, or other malfunction of the carbon wheel concentrator, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the carbon wheel concentrator.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. Corrective action(s) taken shall be recorded.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

See Section D.4

All records required by this permit shall be kept onsite for a minimum of 5 years.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

See Section D.4

**7. Specific Control Equipment Operating Conditions:**

See Section B.1

**8. Alternate Operating Scenarios:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**9. Compliance Schedule:**

The permittee shall submit a compliance schedule for all required transfer efficiency, carry over efficiency and capture efficiency tests to the Division 90 days after issuance of the permit. The Compliance schedule shall specify the emission units and machine points that are to be tested and the proposed test date.  
See Section D.5

**10. Compliance Certification Requirements:**

See Section B.2 and B.6 for compliance demonstration methods and reporting requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****PAINT #2 PERIODIC MONITORING REQUIREMENTS**

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
N/A	N/A	None	Opacity						See Section B.4.
F02	Electrodeposition -Oven	Thermal Oxidizer (TT02)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
F02	Electrodeposition -Oven	Thermal Oxidizer (TT02)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
F02	Electrodeposition -Oven	Thermal Oxidizer (TT02)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 93%
F04	Sealer-Oven	Thermal Oxidizer (TT03)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
F04	Sealer-Oven	Thermal Oxidizer (TT03)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
F04	Sealer-Oven	Thermal Oxidizer (TT03)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 95%
F05	Primer-Booth	Carbon System (TC01)	Destruction Efficiency	Desorption Gas Inlet Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 17°C Below Last Compliance Test, 3 Hour Avg.***
F05	Primer-Booth	Carbon System (TC01)	Destruction Efficiency	Desorption/ Reactivation Fan Operation	Visual	Monthly	Monthly	TBD	Operating
F05	Primer-Booth	Carbon System (TC01)	Destruction Efficiency	Revolutions Per Hour (rph)	TBD	Annually	Annually	TBD	TBD
F05	Primer-Booth	Carbon System (TC01)	Destruction Efficiency	Adsorbent Material Performance	TBD	Annually	Annually	TBD	TBD
F05	Primer-Booth	Carbon System (TC01)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 85%

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
F05	Primer-Booth	Thermal Oxidizer (TT04)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
F05	Primer-Booth	Thermal Oxidizer (TT04)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
F05	Primer-Booth	Booth Scrubber (TS19)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps
F05	Primer-Booth	Thermal Oxidizer (TT04)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 95%
F05	Primer-Booth	Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 Years	Every 5 Years	Each Test	See Section B.2
F05	Primer-Booth	Carbon System (TC01)	Destruction Efficiency	Wheel Rotation	Proximity Switch	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
F05	Primer-Booth	Carbon System (TC01)	Incinerator Collection	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
F05	Primer-Booth	Mix Room Systems	VOC Emission	Material Usage	Material Balance	Monthly	Monthly	N/A	See VOC Limit, Section B(2)
F05	Primer-Oven	Thermal Oxidizer (TT05)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
F05	Primer-Oven	Thermal Oxidizer (TT05)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
F05	Primer-Oven	Thermal Oxidizer (TT05)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 95%
F07	Topcoat Booths (A, B and C)	Booth Scrubber (TS23, TS24, TS25)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
F07	Topcoat Booths (A, B, & C)	Thermal Oxidizer (TT06, TT08, TT10)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
F07	Topcoat Booths (A, B, & C)	Thermal Oxidizer (TT06, TT08, TT10)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
F07	Topcoat Booths (A, B, & C)	Carbon System	Destruction Efficiency	Desorption Gas Inlet Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 17°C Below Last Compliance Test, 3 Hour Avg.***
F07	Topcoat Booths (A, B, & C)	Carbon System (TC02, TC03, TC04)	Destruction Efficiency	Desorption/Reactivation Fan Operation	Visual	Monthly	Monthly	TBD	Operating
F07	Topcoat Booths (A, B, & C)	Carbon System (TC02, TC03, TC04)	Destruction Efficiency	Revolutions Per Hour (rph)	To be determined	Annually	Annually	To be determined	To be determined during next performance test
F07	Topcoat Booths (A, B, & C)	Carbon System (TC02, TC03, TC04)	Destruction Efficiency	Adsorbent Material Performance	See Section B.4	Annually	Annually	See Section B.4	See Section B.4
F07	Topcoat Booths (A, B, & C)	Carbon System (TC02, TC03, TC04)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 85%
F07	Topcoat Booths (A, B, & C)	Carbon System (TC02, TC03, TC04)	Destruction Efficiency	Wheel Rotation	Proximity Switch	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
F07	Topcoat Booths (A, B, & C)	Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 Years	Every 5 Years	Each Test	See Section B.2
F07	Topcoat Booths (A, B, & C)	Mix Room Systems	VOC Emission	Material Usage	Material Balance	Monthly	Monthly	N/A	See VOC Limit, Section B.2



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
F07	Topcoat Booths (A, B, & C)	Carbon System (TC02, TC03, TC04)	Incinerator Collection	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
F07	Topcoat Booths (A, B, & C)	Thermal Oxidizer (TT06, TT08, TT10)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 95%
F07	Topcoat Ovens (A, B, & C)	Thermal Oxidizer (TT07, TT09, TT11)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes & Intermittent Problem Log	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
F07	Topcoat Ovens (A, B, & C)	Thermal Oxidizer (TT07, TT09, TT11)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
F07	Topcoat Ovens (A, B, & C)	Thermal Oxidizer (TT07, TT09, TT11)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	DRE > 95%
F09	Blackout Coating	Booth Scrubber (TS26)	PM Removal Efficiency	Pressure Drop	Gauge	Weekly	Weekly	N/A	0 – 30 psi
F13	Non-process Cleaning Activities (Purge Supply)	Virgin WB Purge Tank	VOC Emission	Virgin WB Purge	Meter (Primary)	Monthly	Monthly	Annual	See Permit Limit Section B.2
F13	Non-process Cleaning Activities (Purge Recovery)	Waste WB Purge Tank	VOC Emission Credit	Recovered WB Purge	Meter (Primary)	Monthly	Monthly	Annual	See Permit Limit Section B.2
F13	Non-process Cleaning Activities (Purge Recovery)	Waste SB Purge Tank	VOC Emission Credit	Recovered SB Purge	Meter (Primary)	Monthly	Monthly	Annual	See Permit Limit Section B.2

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
F13	Non-process Cleaning Activities (Purge Supply)	Virgin SB Purge Tank	VOC Emission	Virgin SB Purge	Meter (Primary)	Monthly	Monthly	Annual	See Permit Limit Section B.2

**\*No later than year 3 of this permit.**

**\*\*“Daily” means on calendar day when the process unit is in operation for part or all of the day.**

**\*\*\*Excursions from temperature standard ranges are based upon 3 hour averages. Averages of data readings need only be recorded for those 3-hour rolling periods in which an excursion occurs.**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**PLASTICS**

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Description and Applicable Regulations:

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

### PLASTICS, 400/400A BUILDING, Operations include the following processes

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
G01	Thermal Injection Molding Operations	March 22, 1991	None	
G02	Steam Injection Molding Operations (PP Bead) (Insignificant Activities List)	March 22, 1991	None	
G03	Reaction Injection Molding	July 17, 1986	Fiber Feed – Filter RF13 for PM Molding - Filter RF12 for PM	
G04	Interior Part Painting BoothsOvens (1, 2 & 3) and Ovens (1,3), including Repair Painting	March 22, 1991	Booth 1 – Scrubber RS01 for PM Booth 2 – Scrubber RS02 for PM Booth 3 – Scrubber RS03 for PM	
G05	Raw Material Supply Systems, including injection part and bumper painting, exterior painting, injection molding (silos), monofoam, mold release, PP bead silos, headliner supply, slush molding supply and regrind (Insignificant Activities List)	March 22, 1991	Regrind – Filter RF11 for PM	
G06	Source Shutdown / Removed	N/A	N/A	
G07	Source Reassigned to Emission Unit G22	N/A	N/A	
G08	Source Shutdown / Removed	N/A	N/A	
G09	Source Reassigned to Emission Unit G22	N/A	N/A	
G10	Source Reassigned to G22	N/A	N/A	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
G11	Door Trim Molding Process, including pouring and adhesive blending/spraying	March 22, 1991	None	
G12	Source Reassigned to Emission Unit G14	March 22, 1991	N/A	
G13	Slush Molding Operation, including molding, miniblasting, high frequency melting, and repair painting	March 22, 1991	System 1 – Filter RF01 for PM System 2 – Filter RF02 for PM System 3 – Filter RF03 for PM System 4 – Filter RF04 for PM	
G14	Vacuum Forming Process (1, 2, & 3), including adhesive spraying, forming press skin feeding, trimming and oven curing	July 17, 1986 / March 22, 1991	Booth 1 – Scrubber RS04 for PM Booth 2 – Scrubber RS05 for PM Booth 3 – Scrubber RS06 for PM	
G15	Headliner Operation including storage, scrap handling, curding, blending, spraying and baking	March 22, 1991	Grinding scrap – Filter RF11 for PM	
G16	Source Reassigned to Emission Unit G19	N/A	N/A	
G17	Water/Wastewater Treatment Operations, including de-ionizing processes and sludge pool processes	March 22, 1991	None	
G18	Source Removed	N/A	N/A	
G19	Non-Process Cleaning Activities, including paint stripping, water blasting, line purging, and surface cleaning	July 17, 1986 / March 22, 1991	None	401 KAR 59:185
G20	Monofoam Molding, including turntables, clamp molds, hot knife scoring / heat treating	July 17, 1986	None	
G21	Exterior Part Painting Operations including:	N/A	N/A	
	Solvent Wiping, Lines A, B	Jan-2005	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
	All Coating Applications, Lines A, B	Jan-2005	Booth A – Filter RF05 for PM Booth B – Filter RF06 for PM Booth A – Scrubber RS07 for PM Booth B – Scrubber RS08 for PM Booths A/B - VOC Carryover to Ovens	
	Repair Painting, Lines A, B	Jan-2005	None	
	Bake Oven, Lines A, B	Jan-2005	Ovens A/B – Incinerator RI01 for VOC	
G22	Bumper Painting Operations including:			
	Solvent Wiping, Lines C, D, E, F	July 17, 1986	None	
	All Coating Applications, Lines C, D, E, F	July 17, 1986	Booth C – Filter (Primer) RF07 for PM Booth D – Filter (Primer) RF08 for PM Booth E – Filter (Primer) RF09 for PM Booth F – Filter (Primer) RF10 for PM Booth C – Scrubber RS09 for PM Booth D – Scrubber RS10 for PM Booth E – Scrubber RS11 for PM Booth F – Scrubber RS12 for PM Booth C/E (Base/Clear) – Carbon RC01 for VOC Booth D/F (Base/Clear) – Carbon RC02 for VOC Booth C/E (Base/Clear) – Th.Oxidizer RT03 for VOC Booth D/F (Base/Clear) – Th.Oxidizer RT05 for VOC Booths C/D/E/F - VOC Carryover to Ovens	
	Repair Painting, Lines C, D, E, F	July 17, 1986	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
	Bake Oven, Lines C, D, E, F	July 17, 1986	Oven C – Th.Oxidizer RT01 for VOC Oven D – Th.Oxidizer RT02 for VOC Oven E – Th.Oxidizer RT04 for VOC Oven F – Th.Oxidizer RT06 for VOC	
G23	Bumper Dry Sanding (Insignificant Activities List)	July 17, 1986	None	
G24	General Exhaust	March 22, 1991	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Part 64, Compliance Assurance Monitoring.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers' recommendations and/or good engineering practice.

The permittee shall conform to the operating conditions, as prescribed in the periodic monitoring requirements table.

**Specific Operating Limitations for Thermal Oxidizers:**

**A.** The average combustion chamber temperature in any 3-hour period shall not fall more than 28°C (50°F) below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point for the thermal oxidizer. The minimum-operating limit for thermal oxidizers is 28°C (50°F) below the minimum set point temperature.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the average combustion temperature as required by the Periodic Monitoring Requirements table, averaged over 3 hours.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations(Continued):****Specific Operating Limitations for Catalytic Incinerators:**

**A.** The average temperature immediately before the catalyst bed in any 3-hour period shall not fall more than 28°C (50°F) below the limit established during the most recent performance test, which demonstrated compliance.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed. This average temperature is the minimum set point for the catalytic incinerator. The minimum-operating limit for catalytic oxidizers is 28°C (50°F) below the minimum set point temperature. **Compliance**

**Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the temperature just before the catalyst bed as required by the Periodic Monitoring Requirements table, average over 3 hours.

**C.** The permittee must develop and implement an inspection and maintenance plan for its catalytic oxidizer(s). The plan must address, at a minimum, the elements specified in paragraphs (C)(i) through (C)(iii) of this section.

**(i)** Annual sampling and analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, the permittee must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.

**(ii)** Monthly external inspection of the catalyst oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

**(iii)** Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, the permittee must replace the catalyst bed or take other corrective action. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst then the permittee must conduct a new performance test to determine destruction efficiency according to Section D.3 of this permit and 40 CFR 60 Subpart A, General Provisions. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and the permittee may continue to use the previously established operating limits for that catalytic oxidizer.

**Specific Operating Limitations for Carbon Wheel Concentrators:**

**A.** The permittee must keep the set point for the desorption gas inlet temperature no lower than 17°C (30°F) below the lower of that set point during the performance test for the concentrator and the average desorption gas inlet temperature established during the performance test.

**B.** The permittee shall use the data collected during the performance test to calculate and record the average desorption gas inlet temperature. The minimum-operating limit for the concentrator is 17°C (30°F) below the set point desorption gas inlet temperature established during the performance test.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations(Continued):****Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the desorption gas inlet temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Conditions for Purging Solvents:**

Except for applicator nozzles/tips, coating applicator purging solvents shall be collected and retained until such time as they are shipped offsite for disposal or recycled. Waste purge solvent tanks shall be kept closed when not in use.

**Specific Operating Limitations for Emission Unit G19:****401 KAR 59:185:§ 4, Cold Cleaners (applies to batch degreasers)****Control Equipment Specifications:**

- (a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.
- (b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.
- (c) On all containers, a label must be on or near the cleaner.
- (d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

**Operating Requirements:**

- (a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.
- (b) The degreaser cover shall be closed when parts are not being handled in the cleaner.
- (c) Cleaned parts shall be drained until dripping stops.

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See periodic monitoring requirements table.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):****401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

(a) In the separation of the air contaminant from the process materials;  
or

(b) In the conversion of the process materials into air contaminants,  
but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**Compliance Demonstration Method:**

(1) For affected facilities that use transfer efficiency in the determination of PM/PM<sub>10</sub> emissions the permittee shall:

Use a transfer efficiency value determined through testing approved by the Division.

Previous transfer efficiency tests may be accepted if the following conditions are met:

(a) The previous test must have been conducted using methods and conditions approved by the Division.

(b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.

(c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):****401 KAR 59:010 §3****Compliance Demonstration Method(Continued):**

(2) Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

For affected facilities with periodic monitoring requirements for particulate emissions the source shall demonstrate continuous compliance by adhering to the periodic monitoring requirements table. The source must maintain a record of deviations from "standard ranges" in the periodic monitoring requirements table and determine the particulate emissions from the deviation. The duration of the deviation shall be the period between when the "out of standard condition" was noted and when it is corrected. If an engineering evaluation utilizing a control efficiency is used to determine particulate emissions for the affected facility, the allowed control efficiency shall be zero during the deviation period unless testing is conducted to prove otherwise. Engineering evaluations for affected facilities with control equipment that utilize a particulate emission rate based on test data must back calculate the control efficiency so that in the event of "out of standard conditions", the permittee can determine "E".

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):**

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
G03	Reaction Injection Molding	N/A	4.13
G04	Interior Part Painting Booths A and B Booth C	0.26	0.86 0.41
G11	Door Trim Molding	N/A	N/A
G13	Slush Molding Operation	N/A	1.28
G14	Vacuum Form Booths 1 and 2 Booth 3	0.14 0.28	1.35 0.42
G15	Headliner	N/A	0.46
G17	Water/Wastewater Treatment	N/A	0.56
G19	Non-Process Cleaning Activities Bumper Paint E/F Purge All Other Cleaning	1.17 1.17	0.14
G20	Monofoam	0.24	2.36
G21	Exterior Part Painting: Line A/B	0.917	1.86
G22	Bumper Painting:	1.040	5.42
G24	General Exhaust	N/A	1.73

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):****Compliance Demonstration Method:**

VOC Value =  $\text{SUM } (U_i \times V_i \times E_i \times (1 - C_i \times F)) / P$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (number of Assembly vehicles produced)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM } (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack "i".

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere more than 498 tons per year of VOC emissions from its Line 2 operations and 1,326 tons per year total from the Plastics shop, based on a 12-month rolling average.

**Compliance Demonstration Method:**

VOC Value =  $\text{SUM } (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$ ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere more than 27.4 tons per year of PM emissions from its Line 2 operations and 70.8 tons per year total from the Plastics shop, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

1) Calculated from the following equation, except where testing specified  
(see item 2)

PM Value =  $\text{SUM } (P \times E_i)$ ,

$P$  = Average shop production throughput

$E_i$  = PM Emission Factor (controlled) for "i",

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

2) Testing, see periodic monitoring requirements table.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4. See Section D.5

### **4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in the Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

#### **Specific Monitoring Requirements for Emission Units G21 and G22:**

An alarm system shall be installed on emission units G21 and G22 which will notify the operator of the units in the event the burner temperature of the incinerator falls below indicator range as prescribed by periodic monitoring requirements table.

#### **Specific Monitoring Requirements for Carbon Concentrators:**

The performance of the adsorbent material will be verified by examining representative samples and testing the performance (adsorbent activity) per the manufacturer's recommendation. The results shall be assessed (e.g., compared to historical results and/or results for new adsorbent) and the adsorbent shall be replaced as appropriate.

Alternatively, performance can be checked with a portable flame ionization detector (FID), photo ionization detector (PID), or other appropriate equipment or methodologies. In this case, the concentration of the adsorber outlet stream, or the percent reduction in concentration of the inlet/outlet stream measurements are compared to historical data from performance tests. The results shall be assessed and the adsorbent shall be replaced as appropriate.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, catalytic incinerators and carbon wheel concentrators, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements (Continued):****Thermal Oxidizer Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer:

1. All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
2. During all periods of operation of the thermal oxidizer in which the 3-hour average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test which demonstrated compliance, or other malfunction of the thermal oxidizer, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the thermal oxidizer.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. Corrective action(s) taken shall be recorded.

**Catalytic Incinerator Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the catalytic incinerator:

1. All 3-hour periods (during coating operations) during which the average temperature immediately before the catalyst bed is more than 28°C (50°F) below the average temperature immediately before the catalyst bed determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
2. All 3-hour periods (during coating operations) which the 3-hour average temperature immediately before the catalyst bed is more than 28°C (50°F) below the average temperature immediately before the catalyst bed determined during the most recent performance test which demonstrated compliance, or other malfunction of the catalytic incinerator, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the catalytic incinerator.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. The corrective action(s) taken shall be recorded.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements (Continued):****Carbon Wheel Concentrator Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the carbon wheel concentrator:

1. All periods (during coating operations) in which the 3-hour average desorption gas inlet temperature is more than 17°C (30°F) below the average desorption gas inlet temperature determined during the most recent performance test, which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.
2. During all periods of operation of the carbon wheel concentrator in which the 3-hour average desorption gas inlet temperature is more than 17°C (30°F) below the average desorption gas temperature determined during the most recent performance test which demonstrated compliance, or other malfunction of the carbon wheel concentrator, a daily log of the following information shall be kept:
  - a. Whether any air emissions were visible from the facilities associated with the carbon wheel concentrator.
  - b. Whether visible emissions were normal for the process.
  - c. The cause of the visible emissions.
  - d. Corrective action(s) taken shall be recorded.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

All records required by this permit shall be kept for a minimum of 5 years.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

See Section B.1.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**8. Alternate Operating Scenarios:**

See Section H.

**9. Compliance Schedule:**

The permittee shall submit a compliance schedule for all required transfer efficiency, carry over efficiency and capture efficiency tests to the Division 90 days after issuance of the permit. The Compliance schedule shall specify the emission units and machine points that are to be tested and the proposed test date.

See Section D.5

The permittee shall submit a site specific inspection and maintenance plan for all catalytic oxidizers within ninety (90) days after issuance of this permit.

**10. Compliance Certification Requirements:**

See Section B.2 and B.6 for compliance demonstration methods and reporting requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****PLASTICS - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
G04	Injection Parts Painting (1, 2, & 3)	Booth Scrubbers (RS01, RS02, RS03)	PM Removal Efficiency	Water Wall Coverage	Visual	Weekly	Weekly	N/A	No Significant Gaps
G04	Injection Parts Painting (1, 2, & 3)	Booth Scrubber s (RS01, RS02, RS03)	Air Speed Through Venturi	Exhaust Air Fan Rotation	Visual	Daily**	Daily**	Weekly Confirm	Rotating
G13	Slush Mold	Fluidized Bed Filters (RF01, RF02, RF03, RF04)	Filter Condition	Press Drop	Gauge	Continuous	Weekly	Annual	0 – 5 in. H <sub>2</sub> O
G14	Vacuum Form, Adhesive Spray (3)	Waterwall Scrubbers (RS04, RS05, RS06)	PM Removal Efficiency	Water Wall Coverage	Visual	Weekly	Weekly	N/A	No Significant Gaps
G14	Vacuum Form, Adhesive Spray (1 & 2)	Waterwall Scrubber s (RS04, RS05, RS06)	PM Removal Efficiency	Water Wall Coverage	Visual	Weekly	Weekly	N/A	No Significant Gaps
G15	Headliner, Adhesive Spray	Exhaust Filters	Filter Condition	All Filters In Place	Visual	Daily** (When in use)	Daily** (When in use)	N/A	No Visible By-Pass
G19	Non-process Cleaning Activities (Purge Recovery)	SolventborneWas te Purge Tank (Line 1 and 2)	VOC Emission Credit	Recovered Purge	Meter	Monthly	Monthly	Annual	See Permit Limit Section B.2
G19	Non-process Cleaning Activities (Purge Usage)	SolventborneVirg in Purge Tank (Line 1 and 2)	VOC Emission	Virgin Purge	Meter	Monthly	Monthly	Annual	See Permit Limit Section B.2
G19	Non-process Cleaning Activities (Purge Usage)	SolventborneVirg in Purge Tank (Injection Parts)	VOC Emission	Virgin Purge	Meter	Monthly	Monthly	Annual	See Permit Limit Section B.2
G21	Ext Part Paint Booths (A & B)	Booth Scrubbers (RS07, RS08)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
G21	Ext Part Paint Booths (A & B)	Exhaust Filters (RF05, RF06)	Filter Condition	All Filters In Place	Visual	Monthly	Monthly	N/A	No Visible By-Pass
G21	Ext Part Paint Booths (A & B)	Booth Exhaust (RF05, RF06)	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 *Years	Every 5 Years*	Each Test	See Section B.2
G21	Ext Part Paint Booths (A & B)	Exhaust Filters (RF05, RF06)	Filter Condition	Press Drop	Gauge	Continuous	Weekly	Annual	0 - 60 mm Hg
G21	Ext Part Paint Ovens (A & B)	Catalytic Incinerator (RI01)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 80%
G21	Ext Part Paint Ovens (A & B)	Catalytic Incinerator (RI01)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
G21	Ext Part Paint Ovens (A & B)	Catalytic Incinerator (RI01)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
G21	Ext Part Paint Ovens (A & B)	Catalytic Incinerator (RI01)	Incinerator Collection	By-Pass Damper Position (confirmation)	Visual	Weekly	Weekly	N/A	Correct Position
G22	Bumper Paint Booths (C,D,E,F)	Exhaust Filters (RF07, RF08, RF09, RF10)	Filter Condition	Press Drop	Gauge	Continuous	Weekly	Annual	0 – 1.1 in. H <sub>2</sub> O
G22	Bumper Paint Booths (C,D,E,F)	Booth Scrubbers (RS09, RS10, RS11, RS12)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps
G22	Bumper Paint Booths (C,D,E,F)	Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 Years*	Every 5 Years*	Each Test	See Section B.2
G22	Bumper Paint Booths (C,D,E,F)	Exhaust Filters (RF07, RF08, RF09, RF10)	Filter Condition	All Filters In Place	Visual	Monthly	Monthly	N/A	No Visible By-Pass
G22	Bumper Paint Ovens (C,D,E,F)	Thermal Oxidizers (RT01, RT02, RT04, RT06)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 95%

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
G22	Bumper Paint Ovens (C,D,E,F)	Thermal Oxidizers (RT01, RT02, RT04, RT06)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
G22	Bumper Paint Ovens (C,D,E,F)	Thermal Oxidizers (RT01, RT02, RT04, RT06)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
G22	Bumper Paint Booths (C,D,E,F)	Carbon System (Abatement) (RC01, RC02)	Destruction Efficiency	Desorption Gas Inlet Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 17°C Below Last Compliance Test, 3 Hour Avg.***
G22	Bumper Paint Booths (C,D,E,F)	Carbon System (RC01, RC02)	Destruction Efficiency	Desorption/Reactivation Fan Operation	Visual	Monthly	Monthly	N/A	Operating
G22	Bumper Paint Booths (C,D,E,F)	Carbon System (RC01, RC02)	Destruction Efficiency	Revolutions Per Hour (rph)	To be determined	Annually	Annually	To be determined	To be determined during next performance test
G22	Bumper Paint Booths (C,D,E,F)	Carbon System (Abatement) (RC01, RC02)	Destruction Efficiency	Adsorbent Material Performance	See Section B.4	Annually	Annually	See Section B.4	See Section B.4
G22	Bumper Paint Booths (C,D,E,F)	Carbon System (Abatement) (RC01, RC02)	Incinerator Collection	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
G22	Bumper Paint Booths (C,D,E,F)	Thermal Oxidizers (Abatement) (RT03, RT05)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 95%
G22	Bumper Paint Booths (C,D,E,F)	Thermal Oxidizers (Abatement) (RT03, RT05)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
G22	Bumper Paint Booths (C,D,E,F)	Thermal Oxidizers (Abatement) (RT03, RT05)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.
G22	Bumper Paint Booths (C,D,E,F)	Carbon Systems (Abatement) (RC01, RC02)	Destruction Efficiency	Wheel Rotation	Proximity Switch	Continuous	Daily	Annual Confirm	No Faults
G22	Bumper Paint Booths (C,D,E,F)	Carbon Systems (Abatement) (RC01, RC02)	Destruction Efficiency	Wheel Rotation (confirmation)	Visual	Weekly	Weekly	N/A	Rotating

**\*No later than year 3 of this permit.**

**\*\*“Daily” means on calendar days when the process unit is in operation for part or all of the day.**

**\*\*\*Excursions from temperature standard ranges are based upon 3-hour averages. Averages of data readings need only be recorded for those 3-hour rolling periods in which an excursion occurs.**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**POWERTRAIN**



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**POWERTRAIN, 800 BUILDING**, Operations include the following processes

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
H01	All Cutting Operations	1988-1999	Filters for PM (MZY 1110-1,2 MZY 1111-1,2) Electrostatic for PM (MKB 1002) HVAC Filters for PM	
H02	Coating Application, including hub and shaft (Insignificant Activities List)	1988-1999	None	
H03	All Honing Operations	1988-1999	4 Cylinder Block (MZY1147) - Filter for PM All Other - HVAC Filters for PM	
H04	All Grinding Operations	1988-1999	HVAC Filters for PM	
H05	Solvent Cleaning Operations, including, CIPG and other areas	1988-1999	None	401 KAR 59:185
H06	Corrosion Inhibitor Application (Insignificant Activities List)	1988-1999	None	
H07	Source Removed	1988	None	
H08	Quenching	1988-1999	HVAC Filters for PM	
H09	Washing (Insignificant Activities List)	1988-1999	HVAC Filters for PM	
H10	Gasket Installation	1988-1999	None	
H11	Raw Material Storage / Supply	1988-1993	Gasoline Tanks - Conservation Valve	
H12	Engine Testing	1988	None	
H13	Operational Support, including material supply systems and scrap material handling (Insignificant Activities List)	1988	None	
H14	Block Impregnation (Insignificant Activities List)	Oct-98	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
H15	Process Lubrication Activities	1988	None	
H16	Process Cleaning Operations (Insignificant Activities List)	1988	None	
H17	Final Assembly Operations (Insignificant Activities List)	1988	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Engine Test Cells/Standards – Compliance Date, May 26, 2006.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

**Specific Operating Limitations for Emission Unit H05:****401 KAR 59:185:§ 4, Cold Cleaners (applies to batch degreasers)**

Control Equipment Specifications:

- (a) The cleaner shall be equipped with a cover and shall be designed so that it can be operated with one hand.
- (b) It shall also be equipped with a drainage system such that the solvent draining from the part will return to a reservoir. If the vapor pressure is greater than 32 mm Hg, then the system must be internal.
- (c) On all containers, a label must be on or near the cleaner.
- (d) The spray, if used, must be a liquid stream, not atomized, and must be under low pressure to minimize splashing.

Operating Requirements:

- (a) If waste solvent is transferred, losses must remain at less than 20% by weight. Waste must be stored in covered containers.
- (b) The degreaser cover shall be closed when parts are not being handled in the cleaner.
- (c) Cleaned parts shall be drained until dripping stops.

Any cold cleaner shall be exempt from the control requirements set forth herein if the criteria of 401 KAR 59:185 Section 8 are met and a record of the applicability of the exemption is maintained by TMMK and submitted to the Division. If at any point in time the criteria of the exemption are not met, the cold cleaner shall be subject to the specific Operating Limitations set forth herein.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See periodic monitoring requirements table.

**401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

Initial compliance with 401 KAR 59:010 shall consist of submittal of engineering evaluations and / or testing for each affected facility. The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. In the case where there are no periodic monitoring requirements associated with the affected facility, continuous compliance shall be assured as long as there are no process or operational changes. The determination of the emission rate "E" in pounds per hour for compliance with 401 KAR 59:010 may also be used to demonstrate compliance with 401 KAR 51:017, except that the period allowed for the determination of "P" shall be one month. Engineering evaluations and / or testing for initial compliance must be submitted to the permit review branch of the Division within 180 days of the issuance of this permit.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations(Continued):

#### **Compliance Demonstration Method(Continued):**

#### **401 KAR 59:010 §3**

For affected facilities with periodic monitoring requirements for particulate emissions the source shall demonstrate continuous compliance by adhering to the periodic monitoring requirements table. The source must maintain a record of deviations from “standard ranges” in the periodic monitoring requirements table and determine the particulate emissions from the deviation. The duration of the deviation shall be the period between when the “out of standard condition” was noted and when it is corrected. If an engineering evaluation utilizing a control efficiency is used to determine particulate emissions for the affected facility, the allowed control efficiency shall be zero during the deviation period unless testing is conducted to prove otherwise. Engineering evaluations for affected facilities with control equipment that utilize a particulate emission rate based on test data must back calculate the control efficiency so that in the event of “out of standard conditions”, the permittee can determine “E”.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
H01	Cutting Operations	0.13	N/A
H03	Honing Operations	0.030	N/A
H04	Grinding Operations	0.015	N/A
H05	Non-Process Cleaning Activities	0.031	N/A
H08	Quenching Activities	0.016	N/A
ALL POINTS	All Powertrain Operations	N/A	3.69

#### **Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F)) / P$ ,

$U_i$  = Usage of material “i”,

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency,

$P$  = Production rate (total number of engines and axles assembled)

PM Value = Measurement, when prescribed by periodic monitoring requirements table. Otherwise PM shall be calculated as follows:

PM Value =  $\text{SUM} (P/P_m \times E_i)$ ,

$P$  = Average shop production throughput,

$P_m$  = Maximum vehicle production rate

$E_i$  = PM Emission Factor (controlled) for each stack “i”.

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):**

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Powertrain Operations of more than 182.4 tons per year of VOC emissions, based on a 12-month rolling average.

**Compliance Demonstration Method:**

VOC Value =  $\text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$  ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,  $F$  = Control efficiency,

$C_i$  = Collection efficiency.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Powertrain Operations of more than 16.1 tons per year of PM emissions, based on a 12-month rolling throughput average.

**Compliance Demonstration Method:**

1) Calculated from the following equation, except where testing specified (see item 2)

PM Value =  $\text{SUM} (P \times E_i)$  ,

$P$  = Average shop production throughput

$E_i$  = PM Emission Factor (controlled) for "i",

See Compliance Demonstration Method for 401 KAR 59:010, this Section.

2) Testing, see periodic monitoring requirements table.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed in its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

The control equipment listed for this emissions unit shall be operated anytime the process is operating. For HVAC filter systems, “in operation” is defined as “all filters being in place, with no emissions by-pass occurring”. All HVAC systems need not be exhausting air, while the process(es) is operating.

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A

**10. Compliance Certification Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****POWERTRAIN - PERIODIC MONITORING REQUIREMENTS**

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
N/A	N/A	None	Opacity						See Section B.4.
H01 H03 H04 H08 H09	HVAC Systems (Powertrain)	HVAC Exhaust Filters	Filter Condition	Pressure Drop	Gauge	Continuous	Intermittent (Problem Log)	Annual	No Alarms
H01	4 Cylinder - Head	Mist Collectors (MKB1002)	Mist Removal	Ionize Voltage	Volt Meter	Continuous	Weekly	Annual	9.5 – 18.0 kvolts
H01	4 Cylinder - Head	Mist Collectors (MKB1002)	Mist Removal	Collector Voltage	Volt Meter	Continuous	Weekly	Annual	2.8 – 10.8 kvolts
H01	4 Cylinder - Head	Mist Collectors (MKB1002)	Mist Collection	Exhaust Fan Rotation	Audio Check	Weekly	Weekly	Annual	Fan Running
H01	V6 - Block	Filter, MZY 1110-2 (3rd stage)	Filter Condition and Collection	Pressure Drop	Gauge	Continuous	Daily**	Annual	0.1 – 4.0 inches H <sub>2</sub> O
H01	V6 - Head	Filter, MZY 1111-1 (3rd stage)	Filter Condition and Collection	Pressure Drop	Gauge	Continuous	Daily**	Annual	0.1 – 4.0 inches H <sub>2</sub> O
H01	V6 - Head	Filter, MZY 1111-2 (3rd stage)	Filter Condition and Collection	Pressure Drop	Gauge	Continuous	Daily**	Annual	0.1 – 4.0 inches H <sub>2</sub> O
H01	V6 - Block	Filter, MZY 1110-1 (3rd stage)	Filter Condition and Collection	Pressure Drop	Gauge	Continuous	Daily**	Annual	0.1 – 4.0 inches H <sub>2</sub> O
H03	4 Cylinder - Block	Mist Collector (MZY 1147)	Mist Collection	Pressure Drop	Gauge	Continuous	Monthly	Annual	0.1 – 2.0 inches H <sub>2</sub> O
H11	Raw Material Storage	Gasoline Tanks	Conservation Vents	Function	Visual	Annual	Annual	N/A	Functions

**\*\*“Daily” means on calendar days when the process unit is in operation for part or all of the day.**



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS**

**PRODUCTION CONTROL**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**PRODUCTION CONTROL OPERATIONS** include the following processes:

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
K01	Dock Unloading Areas (Insignificant Activities List)	July 17, 1986	None	
K02	Parts Conveyance (Insignificant Activities List)	July 17, 1986	None	
K03	Shipping Preparation (Insignificant Activities List)	July 17, 1986	None	
K04	Fork Truck Repair Painting (Insignificant Activities List)	July 17, 1986	None	
K05	Cross Dock (Insignificant Activities List)	Feb 2004	None	
K06	Battery Charging Stations (Insignificant Activities List)	July 17, 1986	None	

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

### **1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B (2).

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

### **2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

#### **Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See periodic monitoring requirements table.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):****401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility is tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
N/A	N/A	N/A	N/A

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Production Control Operations of more than 5 tons per year of VOC emissions.

Compliance Demonstration Method:

$$\text{VOC Value} = \text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) ,$$

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A

**10. Compliance Certification Requirements:**

N/A

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PRODUCTION CONTROL - PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
N/A	N/A	None	Opacity						See section B.4

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS**

**QUALITY CONTROL**



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**QUALITY CONTROL OPERATIONS** include the following processes:

<b>EMISSION UNIT</b>	<b>OPERATION</b>	<b>CONSTRUCTION COMMENCED</b>	<b>CONTROL EQUIPMENT</b>	<b>OTHER APPLICABLE REGULATIONS</b>
J01	Audit Lab (Insignificant Activities List)	July 17, 1986	None	
J02	Raw Material Test Lab (Insignificant Activities List)	July 17, 1986	None	
J03	Test Track Operations (Insignificant Activities List)	July 17, 1986	None	

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See Periodic Monitoring Requirements table.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations(Continued):

#### **401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility is tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
N/A	N/A	N/A	N/A

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Quality Control Operations of more than 5 tons per year of VOC emissions.

Compliance Demonstration Method:

$$\text{VOC Value} = \text{SUM} (U_i \times V_i \times E_i \times (1 - C_i \times F_i)) ,$$

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

### 3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed by its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A

**10. Compliance Certification Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****QUALITY CONTROL - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE  
REGULATIONS, AND OPERATING CONDITIONS**

**TOYOTA LOGISTICS**

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Description and Applicable Regulations:**

Regulations 401 KAR 59:010 and 401 KAR 51:017 apply to all affected facilities listed in the following table.

**TOYOTA LOGISTICS, Operations** include the following processes:

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
L01	Repair Painting (Insignificant Activities List)	July 17, 1986	None	
L02	Accessory Installation (Insignificant Activities List)	July 17, 1986	None	
L03	Shipping Preparation (Insignificant Activities List)	July 17, 1986	None	



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Regulatory Details:**

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applicable to a major stationary source or a major modification which

- (1) Commenced construction after September 2, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

Regulation 401 KAR 59:010, New Process Operations. The provisions of this regulation shall apply to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate in this chapter, commenced on or after July 2, 1975.

**1. Operating Limitations:**

The usage rates of materials used in all affected facilities shall be limited so as not to exceed the emission limitations in Section B.2.

Wherever practicable, the permittee should utilize work practices to minimize emissions from non-process cleaning activities.

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- 1) See Monitoring Requirements, B.4.
- 2) See Periodic Monitoring Requirements table.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations(Continued):****401 KAR 59:010 §3**

Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times (P)^{(0.62)}$$

Where,

E = Emission rate is pounds per hour.

P = Process weight rate to the affected facility in tons per hour.

Process Weight: The total weight of all materials introduced into any affected facility which may cause any emission of particulate matter, but does not include liquid and gaseous fuel charged, combustion air, or uncombined water.

Affected Facility: The last operation preceding the emission of air contaminants, which results:

- (a) In the separation of the air contaminant from the process materials; or
- (b) In the conversion of the process materials into air contaminants, but does not include an air pollution abatement operation.

If  $P \leq 0.50$  tons per hour, then  $E = 2.34$  pounds per hour.

- (1) For affected facilities that use control equipment for PM/PM<sub>10</sub> emissions the permittee shall:

- (i) Comply with the periodic monitoring requirements listed in this Section.

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere of more than the following, as calculated on a monthly average basis:

EMISSION UNIT	OPERATION	VOC LIMIT (lb/job)	PM LIMIT (lb/hr)
N/A	N/A	N/A	N/A

**401 KAR 51:017:** The permittee shall not cause the discharge into the atmosphere from its Toyota Logistics Operations of more than 5 tons per year of VOC emissions.

**Compliance Demonstration Method:**

VOC Value =  $\text{SUM } (U_i \times V_i \times E_i \times (1 - C_i \times F_i))$  ,

$U_i$  = Usage of material "i",

$V_i$  = Volatile organic compound (VOC) content,

$E_i$  = VOC Emission Factor,

$F_i$  = Control efficiency,

$C_i$  = Collection efficiency.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 §4.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements, as prescribed by its Periodic Monitoring Requirements table.

The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack (s) on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

**5. Specific Recordkeeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed by its Periodic Monitoring Requirements table. All periodic monitoring records shall be maintained for a period of not less than 5 years.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compounds (VOC) emissions and Particulate Matter (PM) emissions shall be calculated on a twelve-month rolling average and recorded. Following the end of each month, pounds per job limits for VOC and pounds per hour limits for PM shall be calculated and recorded. These records shall represent the most recent year and shall show compliance with VOC and PM emission limitations listed in this permit. These records shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring information listed in Sections B.4 and B.5 of this permit. (See Section F.5 for specific reporting dates.) The report shall list any “out of standard” conditions or periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

**7. Specific Control Equipment Operating Conditions:**

The permittee shall install, maintain, and operate its control equipment in accordance with manufacturers’ recommendations and/or good engineering practice.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**8. Alternate Operating Scenarios:**

N/A

**9. Compliance Schedule:**

N/A

**10. Compliance Certification Requirements:**

N/A

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****TOYOTA LOGISTICS - PERIODIC MONITORING REQUIREMENTS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
N/A	N/A	None	Opacity						See Section B.4.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation.

	SHOP	EMISSION UNIT	DESCRIPTION	Applicable Regulations
1	Assembly 1	A04	Miscellaneous Adhesive Applications	401 KAR 59:010
2		A05	Fluid Filling Operations	401 KAR 59:010
3		A07	Process Cleaning Activities	401 KAR 59:010
4		A08	Process Lubrication	401 KAR 59:010
5		A10	Paint Hospital	401 KAR 59:010
6		A11	A11-Assembly 1 Mix Room	401 KAR 59:010
7		A12	Miscellaneous Assembly Operations	401 KAR 59:010
8	Assembly 2	B04	Miscellaneous Adhesive Applications	401 KAR 59:010
9		B05	Fluid Filling Operations	401 KAR 59:010
10		B07	Process Cleaning Activities	401 KAR 59:010
11		B08	Process Lubrication	401 KAR 59:010
12		B10	Paint Hospital	401 KAR 59:010
13		B11	Assembly 2 Mix Room	401 KAR 59:010
14		B12	Miscellaneous Assembly Operations	401 KAR 59:010
15	Body Operations	C01	Die Construction	401 KAR 59:010
16		C11	Process Lubrication	401 KAR 59:010
17		C13	Fuel Tank Cleaning	401 KAR 59:010
18	Facilities Control	D02	Facilities Control Wastewater Pretreatment	401 KAR 59:010
19		D05	Facilities Control Cooling Towers	401 KAR 59:010
20		D07	Facilities Control Back-up Generators(4)	401 KAR 59:010
21		D07	Facilities Control Rental Back-up Generator(1)	401 KAR 59:010
22		D08	Combustion Sources < 1 MMBtu/Hr	401 KAR 59:010
23	Paint 1	E03	Metal Finish Line	401 KAR 59:010
24		E08	Inspection Lines	401 KAR 59:010
25		E10	Moon Roof Installation	401 KAR 59:010
26		E16	Robot Teaching Booth	401 KAR 59:010
27		E17	Two Tone Masking Booth	401 KAR 59:010
28	Paint 2	F01	Phosphate	401 KAR 59:010
29		F03	Metal Finishing Line	401 KAR 59:010
30		F08	Inspection Lines	401 KAR 59:010
31		F10	Moon Roof Installation	401 KAR 59:010
32		F16	Robot Teaching	401 KAR 59:010
33		F17	Two Tone Masking Booth	401 KAR 59:010
34	Plastics	G02	Steam Injection Molding	401 KAR 59:010
35		G05	Raw Material Supply	401 KAR 59:010
36		G23	Bumper Dry Sanding A/B	401 KAR 59:010
37	Power Train	H02	Coating Application	401 KAR 59:010
38		H06	Corrosion Inhibitor Application	401 KAR 59:010
39		H09	Washing	401 KAR 59:010
40		H13	Operational Support	401 KAR 59:010
41		H14	Block Impregnation	401 KAR 59:010
42		H16	Process Cleaning Activities	401 KAR 59:010
43		H17	Final Assembly Operations	401 KAR 59:010
44	Production Control	K01	Dock Unloading Areas	401 KAR 59:010
45		K02	Parts Conveyance	401 KAR 59:010
46		K03	Shipping Preparation	401 KAR 59:010

## SECTION C - INSIGNIFICANT ACTIVITIES

47		K04	Fork Truck Repair Painting	401 KAR 59:010
48		K05	Cross Dock	401 KAR 59:010
49		K06	Battery Charging Stations	401 KAR 59:010
50	Quality Control	J01	Audit Lab	401 KAR 59:010
51		J02	Raw Material Test Lab	401 KAR 59:010
52		J03	Test Track Operations	401 KAR 59:010
53	Toyota Logistics	L01	Repair Painting	401 KAR 59:010
54		L02	Accessory Installation	401 KAR 59:010
55		L03	Shipping Preparation	401 KAR 59:010

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

1. As required by Section 1b of the material incorporated by reference in 401 KAR 52:020, Section 10; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
3. The use of the Protocol for Determining Daily Volatile Organic Compound Emission Rates of Automobile and Light Duty Truck Operations (EPA-450/3-88-018) and / or the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks (40 CFR Part 63 Subpart IIII) is authorized for performing the Compliance Demonstration Methods required by this permit.
4. The permittee shall conform to all applicable requirements prescribed by 40 CFR 60 Subpart MM. The Division has approved an alternative to the requirement of 40 CFR 60.395 that requires record keeping and reporting of the temperature difference across the catalyst bed of catalytic incinerators. This alternative is specified in 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks, which was finalized in the Federal Register on April 26, 2004. The minimum requirements of the inspection and maintenance plan are specified in Section B of this permit.

### Compliance Demonstration Method for 40 CFR 60 Subpart MM 60.392:

$$G = D * E$$

$$K = (1 - \eta_{CO})$$

$$N = 1 - K$$

$$L = (K) * G$$

$$O = (N) * G$$

$$Q_i = L * (1 - \eta_{BI} * \eta_{BIC}) + O * (1 - \eta_{OI} * \eta_{OIC})$$

$$Q = \sum Q_i$$

Definition of variables:

D = Paint usage (liters/month)

E = VOC content (kg/liter)

G = Usage of VOC (kg)

K = VOC's to booth (weight fraction)

L = VOC's to booth (kg)

N = VOC's to oven (weight fraction)

O = VOC's to oven (kg)

Q = Controlled emission rate (kg) of VOC for the Emission Unit Line

$Q_i$  = Controlled emission rate (kg) of VOC per coating type (e.g., solidcoat, basecoat, etc.)



**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)****Compliance Demonstration Method for 40 CFR 60 Subpart MM 60.392(Continued):**

$\eta_{BI}$  = Booth incinerator efficiency  
 $\eta_{BIC}$  = Booth incinerator capture efficiency  
 $\eta_{CO}$  = Carry over efficiency  
 $\eta_{OI}$  = Oven incinerator efficiency  
 $\eta_{OIC}$  = Oven incinerator capture efficiency

$$H = D*(F/100)$$

$$J_i = H*(\eta_{TE})$$

$$J = \sum J_i$$

Definition of variables:

D = Paint usage (liter)

F = Volume of solids (%)

H = Volume of solids applied (liter)

J = Volume of solids deposited for the Emission Unit Line

$J_i$  = Volume of solids deposited per coating type (e.g., solidcoat, basecoat, etc.)

$\eta_{TE}$  = Transfer efficiency

NSPS Value =  $Q/J$  (kilogram of VOC per liter of applied coating solids)

**5. Compliance Demonstration Method for Transfer Efficiency Testing:**

- (1) For affected facilities that use transfer efficiency in the determination of kilograms of VOC per liter of applied solids the permittee shall:
- (i) Use the transfer efficiency value specified in 40 CFR 60.393 for the application method used; or
  - (ii) Use a transfer efficiency value determined through engineering evaluations<sup>1</sup> or representative testing approved by the Division. Previous transfer efficiency tests may be accepted if the following conditions are met:
    - (a) The previous test must have been conducted using methods and conditions approved by the Division.
    - (b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.
    - (c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

<sup>1</sup>Engineering Evaluations shall be submitted to the permit review branch of the Division.

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

### **Compliance Demonstration Method for Carry Over Efficiency Testing:**

- (2) For affected facilities that use carry over efficiency in the determination of VOC emissions the permittee shall:
- (i) Use a carry over efficiency value determined through engineering evaluations<sup>1</sup> or representative testing approved by the Division. Previous carry over efficiency tests may be accepted if the following conditions are met:
    - (a) The previous test must have been conducted using methods and conditions approved by the Division.
    - (b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.
    - (c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

### **Compliance Demonstration Method for Capture Efficiency Testing:**

- (3) For affected facilities that use capture efficiency in the determination of VOC emissions the permittee shall:
- (i) Use a capture efficiency value determined through engineering evaluations<sup>1</sup> or representative testing approved by the Division. Previous capture efficiency tests may be accepted if the following conditions are met:
    - (a) The previous test must have been conducted using methods and conditions approved by the Division.
    - (b) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.
    - (c) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the operating parameters.

### **Compliance Demonstration Method for Standard Gallons per Job Calculation:**

- (4) The permittee shall notify the Division of any changes to the methodology for determining the standard gallons of material per job for the purposes of calculating emissions.

The term "Permit" as it is used in this document is defined by 401 KAR 52:020, Section 26, Cabinet Provisions and Procedures for Issuing Title V Permits, 2 (II) 11(b):

"For sources that are subject to 401 KAR 51:017 or 51:052, the final determination under PSD/NSR procedures shall be the proposed permit for Title V purposes."

<sup>1</sup>Engineering Evaluations shall be submitted to the permit review branch of the Division.

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

### **Maximum Achievable Control Technology (MACT) Standards:**

This source is subject to the following MACT Standards<sup>2</sup>:

40 CFR Part 63 Subpart PPPPP, National Emission Standards for Hazardous Air Pollutants: Engine Test Cells/Stand – Compliance Date, May 26, 2006.

40 CFR Part 63 Subpart MMMM, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts – Compliance Date, January 2, 2007.

40 CFR Part 63 Subpart PPPP, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products – Compliance Date, April 19, 2007.

40 CFR Part 63 Subpart IIII, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light-Duty Trucks – Compliance Date, April 26, 2007.

As specified in 40 CFR Part 63 Subpart IIII, the source has the option to include miscellaneous metal parts and plastic parts and products surface coating operations under Subpart IIII. The source has yet to determine if it will exercise this option. The source must notify the Division no later than January 2, 2005 of its intention to include miscellaneous metal parts coating under Subpart IIII or Subpart MMMM. The source must notify the Division no later than April 19, 2005 of its intention to include plastic parts and products coating under Subpart IIII or Subpart PPPP.

<sup>2</sup>The source may be or become subject to other MACT Standards before this permit expires.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## **SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V )1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

## **SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## **SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Frankfort Regional Office  
[643 Teton Trail, STE B](#)  
[Frankfort, KY 40601-1758](#)

U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

**SECTION G – GENERAL PROVISIONS****(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].



**SECTION G – GENERAL PROVISIONS (CONTINUED)**

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
6. Any condition or portion of this permit, which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

## **SECTION G – GENERAL PROVISIONS (CONTINUED)**

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.

### **(b) Permit Expiration and Reapplication Requirements**

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### **(c) Permit Revisions**

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**SECTION G – GENERAL PROVISIONS (CONTINUED)****(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

G21 – Exterior Parts Painting

G22 – Bumper Painting

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points G21 and G22 in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

## **SECTION G – GENERAL PROVISIONS (CONTINUED)**

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test
  6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
  7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
  8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.
- (e) Acid Rain Program Requirements
1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

## **SECTION G – GENERAL PROVISIONS (CONTINUED)**

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

## SECTION G – GENERAL PROVISIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

**SECTION H – ALTERNATE OPERATING SCENARIOS**

EMISSION UNIT	OPERATION	CONSTRUCTION COMMENCED	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
G22	Bumper Painting Operations including:			
	Solvent Wiping, Lines C, D, E, F	July 17, 1986	None	
	All Coating Applications, Lines C, D, E, F	July 17, 1986	Booth C – Filter (Primer) RF07 for PM Booth D – Filter (Primer) RF08 for PM Booth E – Filter (Primer) RF09 for PM Booth F – Filter (Primer) RF10 for PM Booth C – Scrubber RS09 for PM Booth D – Scrubber RS10 for PM Booth E – Scrubber RS11 for PM Booth F – Scrubber RS12 for PM Booth E (Base/Clear) – Carbon RC01 for VOC Booth F (Base/Clear) – Carbon RC02 for VOC Booth E (Base/Clear) – Th. Oxidizer for VOC Booth F (Base/Clear) – Th. Oxidizer for VOC Booths C/D/E/F - VOC Carryover to Ovens	
	Repair Painting, Lines C, D, E, F	July 17, 1986	None	
	Bake Oven, Lines C, D, E, F	July 17, 1986	Oven C – Th.Oxidizer RT01 for VOC Oven D – Th.Oxidizer RT02 for VOC Oven E – Th.Oxidizer RT04 for VOC Oven F – Th.Oxidizer RT06 for VOC	

## **SECTION H – ALTERNATE OPERATING SCENARIOS**

### **Alternate Operating Scenario Conditions:**

The Potential VOC emissions from emission unit G22 shall be reduced from 178 tons per year (based on a rolling twelve month average) to less than or equal to 141 tons per within two (2) years of the issuance of this permit. If this emission reduction has not occurred within the two year period, then emission unit G22 shall operate under the conditions specified in Section B of this permit.



**SECTION H – ALTERNATE OPERATING SCENARIOS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
G22	Bumper Paint Booths (C,D,E,F)	Exhaust Filters (RF07, RF08, RF09, RF10)	Filter Condition	Press Drop	Gauge	Continuous	Weekly	Annual	0 – 1.1 in. H <sub>2</sub> O
G22	Bumper Paint Booths (C,D,E,F)	Booth Scrubbers (RS09, RS10, RS11, RS12)	PM Removal Efficiency	Gaps at Venturi	Visual	Weekly	Weekly	N/A	No Significant Gaps
G22	Bumper Paint Booths (C,D,E,F)	Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 17)	Every 5 Years*	Every 5 Years*	Each Test	See Section B.2
G22	Bumper Paint Booths (C,D,E,F)	Exhaust Filters (RF07, RF08, RF09, RF10)	Filter Condition	All Filters In Place	Visual	Monthly	Monthly	N/A	No Visible By-Pass
G22	Bumper Paint Ovens (C,D,E,F)	Thermal Oxidizers (RT01, RT02, RT04, RT06)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 95%
G22	Bumper Paint Ovens (C,D,E,F)	Thermal Oxidizers (RT01, RT02, RT04, RT06)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
G22	Bumper Paint Ovens (C,D,E,F)	Thermal Oxidizers (RT01, RT02, RT04, RT06)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
G22	Bumper Paint Booths (E,F)	Carbon System (Abatement) (RC01, RC02)	Destruction Efficiency	Desorption Gas Inlet Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 17°C Below Last Compliance Test, 3 Hour Avg.***
G22	Bumper Paint Booths (E,F)	Carbon System (RC01, RC02)	Destruction Efficiency	Desorption/ Reactivation Fan Operation	Visual	Monthly	Monthly	N/A	Operating
G22	Bumper Paint Booths (E,F)	Carbon System (RC01, RC02)	Destruction Efficiency	Revolutions Per Hour (rph)	To be determined	Annually	Annually	To be determined	To be determined during next performance test

**SECTION H – ALTERNATE OPERATING SCENARIOS**

<b>Emission Unit</b>	<b>Operation</b>	<b>Equipment Monitored</b>	<b>Characteristic Monitored</b>	<b>Parameter Monitored</b>	<b>Method or Device</b>	<b>Monitoring Frequency</b>	<b>Recording Frequency</b>	<b>Calibration Frequency</b>	<b>Standard Range</b>
G22	Bumper Paint Booths (E,F)	Carbon System (Abatement) (RC01, RC02)	Destruction Efficiency	Adsorbent Material Performance	See Section B.4	Annually	Annually	See Section B.4	See Section B.4
G22	Bumper Paint Booths (E,F)	Carbon System (Abatement) (RC01, RC02)	Incinerator Collection	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Annual Confirm	No Faults
G22	Bumper Paint Booths (E,F)	Thermal Oxidizers (Abatement) (RT03, RT05)	Destruction Efficiency	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years*	Every 5 Years*	Each Test	DRE > 95%
G22	Bumper Paint Booths (E,F)	Thermal Oxidizers(Abatement) (RT03, RT05)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Not More Than 28°C Below Last Compliance Test, 3 Hour Avg.***
G22	Bumper Paint Booths (E,F)	Thermal Oxidizers(Abatement) (RT03, RT05)	Destruction Efficiency	Burner Temperature	Thermocouple	15 Minutes	15 Minutes	Annual	Setpoint = Average Temperature established during performance test
G22	Bumper Paint Booths (E,F)	Carbon Systems (Abatement) (RC01, RC02)	Destruction Efficiency	Wheel Rotation	Proximity Switch	Continuous	Daily	Annual Confirm	No Faults
G22	Bumper Paint Booths (E,F)	Carbon Systems (Abatement) (RC01, RC02)	Destruction Efficiency	Wheel Rotation (confirmation)	Visual	Weekly	Weekly	N/A	Rotating

**SECTION I – COMPLIANCE SCHEDULE**



